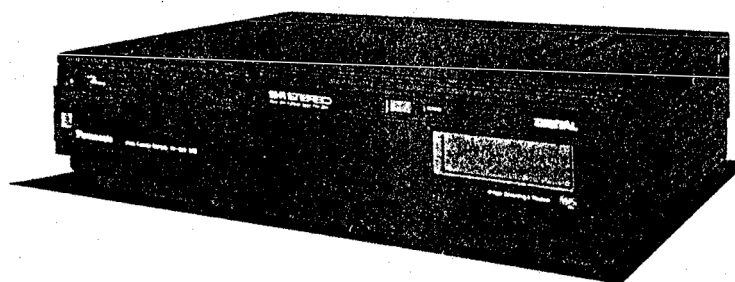


Service Manual

General Description
Adjustment Procedures
Block/Schematic Diagrams
Exploded Views/Parts List

Video Cassette Recorder

Panasonic
VHS
PAL
Hi-Fi
HQ
DIGITAL
NV-D80
EG
B
EV


SPECIFICATIONS

ITEM	SPECIFICATION	ITEM	SPECIFICATION
POWER	SOURCE: 220 V 50/60 Hz (NV-D80EG/EV) 240 V 50/60 Hz (NV-D80B)	AUDIO	HEAD: 1 Stationary head (Normal Audio) 2 rotary heads (Hi-Fi 2CH)
	CONSUMPTION: 33 watts (NV-D80EG/EV) 32 watts (NV-D80B)		INPUT: AUDIO IN Connector (Phono type) More than -10 dBV (316 mV), more than 50 k Ω EURO AV Connector (21 pin) More than -10 dBV (316 mV), more than 10 k Ω
RECORDING SYSTEM	2 rotary heads, helical scanning system		OUTPUT: AUDIO OUT Connector (Phono type) -8 dBV (400 mV), Less than 1 k Ω EURO AV Connector (21 pin) -6 dBV (500 mV), Less than 1 k Ω HEAD PHONE Jack -30 dBV, 8 Ω
	PAL		TRACK: 1 track (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)
TV TUNER SYSTEM	VHF: CH2~CH54 (PAL/SECAM B) 75 Ω unbalanced (NV-D80EG) CH2~CH10 (PAL B) 75 Ω unbalanced (NV-D80EV) UHF: CH21~CH69 (PAL/SECAM G) 75 Ω unbalanced (NV-D80EG) CH21~CH69 (PAL I) 75 Ω unbalanced (NV-D80B) CH21~CH69 (PAL G) 75 Ω unbalanced (NV-D80EV)	TAPE FORMAT	VHS Cassette tape (Tape width 12.7 mm)
RF OUT SYSTEM	UHF: CH36 $\pm$ 4 (PAL/SECAM G) 73 $\frac{+2}{-3}$ dB μ , 75 Ω terminated (NV-D80EG) CH36 $\pm$ 4 (PAL I) 73 $\pm$ 3 dB μ , 75 Ω terminated (NV-D80B) CH36 $\pm$ 4 (PAL G) 70 $\frac{+2}{-3}$ dB μ , 75 Ω terminated (NV-D80EV)	TAPE SPEED	SP: 23.39 mm/s LP: 11.695 mm/s Record/Playback Time: SP: 4 hours with 240 min. type tape LP: 8 hours with 240 min. type tape FF/REW Time 5.5 min. with 180 min. type tape
		DIMENSIONS	430(W) $\times$ 109.5(H) $\times$ 357(D) mm
VIDEO	HEADS: 4 rotary heads 1 pair for SP recording, playback and trick play (L-R heads) 1 pc. for LP recording, playback and trick play (L'-R' heads)	WEIGHT	7.1 kg (NV-D80EG/EV) 7.0 kg (NV-D80B)
	INPUT: VIDEO IN Connector (BNC type) 1.0 Vp-p, 75 Ω terminated EURO AV Connector (21 pin) 1.0 Vp-p, 75 Ω terminated	STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. Infra-red remote controller 2 pc. Audio Cables 1 pc. Digital Scanner Case 1 pc. Digital Scanner 1 pc. Programme sheet 1 pc. AC Mains Lead
	OUTPUT: VIDEO OUT Connector (BNC type) 1.0 Vp-p, 75 Ω terminated EURO AV Connector (21 pin) 1.0 Vp-p, 75 Ω terminated		

and dimensions shown are approximate.
 ations are subject to change without notice.

09070377
 SM-NVD80EG
 SVC MNL

Panasonic

Matsushita Electric Trading Co., Ltd.
 P.O. Box 288, Central Osaka Japan

Technical Information

Subject: How To Make Easier Servicing

1. HOW TO CHECK OR REPLACE THE TIMER CIRCUIT

When checking or replacing the Timer Circuit, the following steps should be followed to protect this circuit.

- (1) Disconnect the AC mains.
- (2) Make a short circuit at C7571 by connecting a wire to both leads wire of the C7571.
- (3) Check or replace the parts.
- (4) After checking or replacing the parts, remove the short circuit from C7571.

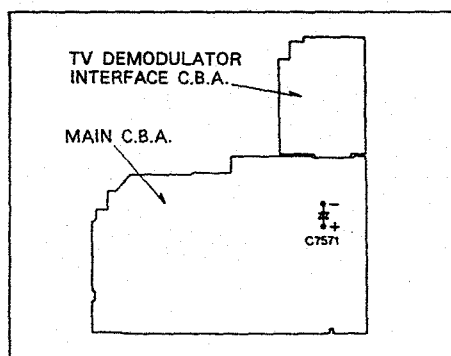


Fig. 1

2. HOW TO RELEASE THE ELECTRONIC LOCK

When you forget the 4 digit personal code number, the following steps should be followed to release the Electronic Lock.

IN CASE OF NV-D80EG/EV

- (1) Press the Electronic Lock released switch as shown below and this switch can be pressed on the bottom case by using the Plastic tip driver.
- (2) Then the Electronic Lock is now released and the VTR will be turned on.

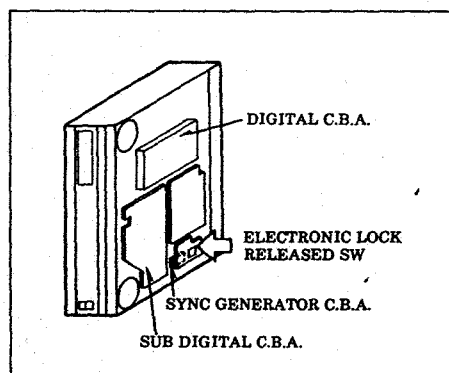


Fig. 2

IN CASE OF NV-D80B

- (1) Remove the Top case and Front panel.
- (2) Make a short circuit between TP7515 and TP7516 on the Timer C.B.A. by connecting a jumper wire and remove it.
- (3) Then the Electronic Lock is now released and the VTR will be turned on.

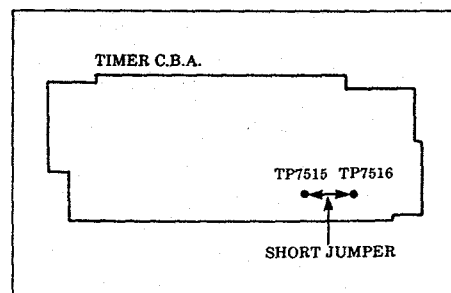


Fig. 3

SECTION 1 GENERAL DESCRIPTIONS

1-1. FEATURES

1. Digital NR Switch

This switch can be used to minimize noise in all pictures played back or received through the VTR.

2. Digital Special Effect

The special digital picture effects can be enjoyed by using the Remote Controller.

3. 1-Month Calendar Timer

The clock/timer of the VTR is programmed with the calendar up to the end of 2001, so it knows exactly what day of the week it is on any given date. Programming of as many as 8 timer recordings is possible up to one month in advance.

4. VPS (Video Programme System) (NV-D80EG/EV)

The Video Programme System is an extremely convenient system which assures that the TV programmes you have programmed for timer recording will be recorded exactly from beginning to end, even if the actual broadcasting time is different from the scheduled time.

5. Auto Operation

The extremely convenient Auto Operation functions of this VTR include Auto Start and Auto Play when a recorded cassette is inserted, Auto Eject which indicates that an inserted cassette is not suitable for recording, Power-Off Eject for ejecting a cassette even with the VTR off, and Auto Rewind at the end of a tape. If the VTR On/Off Switch is pressed during the rewind mode including Auto Rewind, the VTR will eject the cassette and turn itself off when rewinding is completed.

6. Super OTR Function (One-Touch Timer Recording)

This convenient function makes it possible to easily programme the VTR for recording of TV programmes with immediate start or with start within 24 hours by precisely setting the starting time and ending time to the desired minute. When the recording ends, the VTR will automatically turn itself off.

7. HQ (High Quality) Picture System

Video recorders carrying the HQ symbol mark feature the new VHS High Quality Picture System. This system assures complete compatibility with VTRs that use the conventional VHS system.

8. Lap Time Counter

The new Lap Time Counter is a great improvement over the approximate counter systems of conventional VTRs. It gives you an exact reading of the elapsed tape time in hours, minutes and seconds, and makes it easy to calculate the tape time left on a cassette.

9. Digital Scanner

This Digital Scanner lets you programme timer recordings by tracing the corresponding bar codes on the supplied Programming Sheet and then transmitting the data to the VTR.

10. VHS Index Search System

With the Index Search function, up to 20 addresses (places where an Index signal is recorded) can be skipped to directly locate the beginning of the desired programme in forward or reverse direction in the Fast Forward or Rewind mode.

11. Intro Scan Function

The Intro Scan function plays back the first 10 seconds of each programme (recorded with index signal) on a tape one after another.

12. Electronic Lock (NV-D80EG/EV)

This Electronic Lock function makes it possible to prevent unauthorized use of the VTR by inputting a personal code number with the Remote Controller.

13. Hi-Fi Stereo System

14. Recording and Playback of Stereo, Bilingual and Monaural TV Programmes (NV-D80EG/EV)

The new hi-fi stereo system in combination with the built-in multiplex tuner can process audio two-channel as well as monaural signals for both recording and playback. Even if the TV set used is of the mono type, stereo or bilingual sound of recorded programmes or sound of TV programmes, being received on the VTR tuner and played back through the TV set can be reproduced via a connected hi-fi stereo system with external speakers.

15. Recording and Playback of "Simulcast" Sound

This VTR allows recording and playback of the stereo sound of TV programmes broadcast via "Simulcast" by connecting an FM tuner to the Audio Input Sockets.

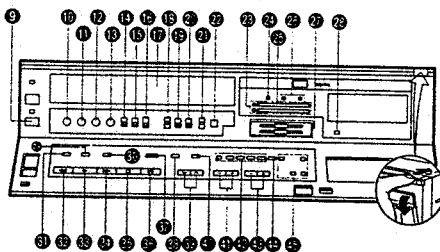
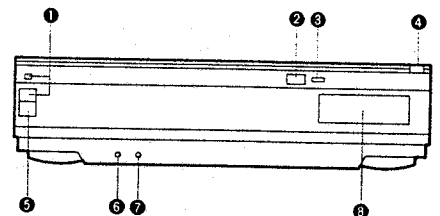
16. Digital Still, Digital Still Advance and Digital Double Fine Slow Playback

17. Programmable Remote Controller

18. 8 Hours Recording and Playback

1-2. CONTROLS AND COMPONENTS

FRONT



- 1 VTR On/Off Switch with Indicator
- 2 Infra-red Remote Control Receiver
- 3 Digital Indicator
- 4 Control Panel Open Button
- 5 Cassette-in Indicator
- 6 Headphones Socket
- 7 Microphone Input Socket
- 8 Multi-Function Display
- 9 Eject Button (▲)

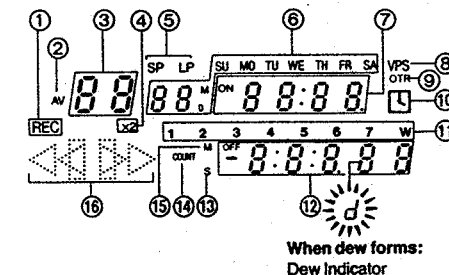
- 10 Headphones Output Level Control
- 11 Tracking Control
- 12 Slow Tracking Control
- 13 Picture Sharpness Control
- 14 Edit Switch
When the Dubbing (copying) from one video cassette to another VTR and receiving weak TV broadcasts from Tuner, the Edit Switch should be set to "On" position.
- 15 Tape Speed Selector
For recording either of two tape speeds can be selected. During playback the recorder selects automatically the correct speed. Select the desired tape speed with the Tape Speed Selector before recording.
* Set to the "SP" position for normal speed.
* Set to the "LP" position for slow speed. The corresponding indicator (SP or LP) lights up during recording and playback in the Multi-Function Display.
- 16 Digital NR Switch
This switch can be used to minimize noise in all pictures that are played back or received through the VTR. Usually this switch is set to position "1".
When the picture is hard to see due to excessive picture noise, set the switch to position "2".
*When the switch is set to position "2" or "1", and after-image may occur.
- 17 Cassette Compartment
- 18 Audio Level Meter Selector
- 19 Audio Rec Level Control Selector
- 20 MPX Filter Switch
If the sound is impaired by high frequency distortion when recording from an FM tuner, the MPX Filter Switch should be set to "On" position.
- 21 Input Signal Selector
- 22 Timer Record Button
- 23 Audio Playback Mode Indicators
- 24 Simulcast Indicator
- 25 Audio Level Meter
- 26 Audio Recording Mode Indicators (NV-D80EG/EV)
- 27 Audio Rec Level Controls

- 28 Audio Dubbing Indicator
- 29 Audio Playback Mode Selector
- 30 Audio Dubbing Button
- 31 Euro AV Button
- 32 Rewind ◀◀/Review ▶▶ Button
When the Rewind/Review Button is kept pressed, the unit will rewind the tape in reverse direction.
When the Rewind/Review Button is kept pressed while the VTR is in the playback mode, the tape will be played back in reverse direction at about 7 times (SP mode), a times (LP mode) of the normal speed.
- 33 Play Button (▶)
- 34 Fast Forward ▶▶/Cue ◀▶ Button
When the Fast Forward/Cue Button is kept pressed, the unit will rewind the tape in forward direction.
When the Fast Forward/Cue Button is kept pressed while the VTR is in the playback mode, the tape will be played back at about 7 times (SP mode), a times (LP mode) of the normal speed.
- 35 Stop Button (■)
- 36 Pause/Still Button (||)
- 37 Record Button (●)
- 38 Memory/Search Button
When this button is pressed once, the Memory Indicator "M" will light up, and when it is pressed one more time, the Search Indicator "S" will appear instead. When it is pressed a third time the Search Indicator "S" will disappear.
- 39 Channel Selection Up and Down Buttons
- 40 Reset/Index Button
- 41 OTR On Buttons
- 42 Timer Controls
- 43 OTR Off Buttons
- 44 VPS Button (NV-D80EG/EV)
The VPS Button can be used which the TV programmes scheduled for timer recording will be recorded exactly from beginning to end, even if the actual broadcasting time is different from the scheduled time.
- 45 Tuner Set-up Controls

Channel Indication	TV channel	
	NV-D80EG	NV-D80EV
2-12	E2-E12	E2-E12
13-20	—	A-H
21-69	21-69	21-69
74-76	—	S1-S3
80-89	S1-S10	M1-M10
90-99	S11-S20	U1-U10
121-141	S21-S41	—

• In Italy: H1...(11), H2...(12)
13-20...(A-H)

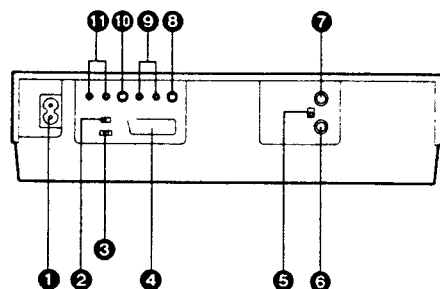
MULTI-FUNCTION DISPLAY



When dew forms:
Dew Indicator

- 1 Recording Indicator
- 2 Euro AV Indicator
- 3 Channel Display
- 4 Double Speed Indicator
- 5 Tape Speed Indicator
- 6 Date Display
- 7 Clock Display
- 8 VPS Indicator (NV-D80EG/EV)
- 9 OTR Indicator
- 10 Timer Recording Display
- 11 Timer Programme Number
- 12 Tape Counter Display
- 13 Search Indicator
- 14 Tape Counter
- 15 Memory Indicator
- 16 Tape Running Display

REAR



1 AC Mains Lead Socket

2 DBS Switch (NV-D80EG)

With this switch, the video signal can be switched over to the Euro AV Connector. When a satellite TV decoder (descrambler) is connected, the satellite signal can be recorded by pressing the Euro AV Button (Euro AV mode) or displayed on the TV set.

3 Colour Mode/Test Signal Switch

4 Euro AV Socket

5 RF Signal Level Switch (NV-D80EV/B)

6 RF Input Socket

7 RF Output Socket

8 Video Output Socket

9 Audio Output Sockets

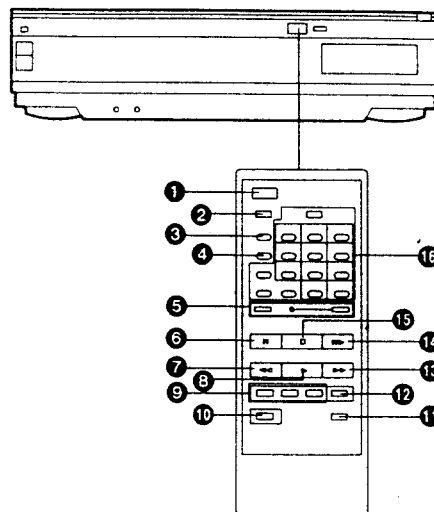
10 Video Input Socket

11 Audio Input Sockets

1-3. PROGRAMMABLE REMOTE CONTROLLER

— Unit Number: VEQ0574 (NV-D80B) —

— Unit Number: VEQ0573 (NV-D80EG/EV) —



1 VTR On/Off Button

2 Audio Select Button

3 Memory/Search Button

4 Reset/Index Button

5 Record Buttons (●)

6 Pause/Still Button (II)

7 Rewind ◀◀/Review ◀▶ Button

8 Play Button (▶)

9 Slow Buttons

When this button is pressed, the unit will play back the tape in slow-motion at 1/10 of normal speed. The slow playback speed can be varied between 1/25 and 1/5 of normal speed by using the "+" and "-" Buttons.

10 Digital Function Button

11 Intro Scan Button

12 Double Speed Playback Button (x2)

13 Fast Forward ▶▶/Cue ▶▶▶▶ Button

14 Still Advance Button (III)

15 Stop Button (■)

16 Timer Recording & Programme Position Selector Buttons

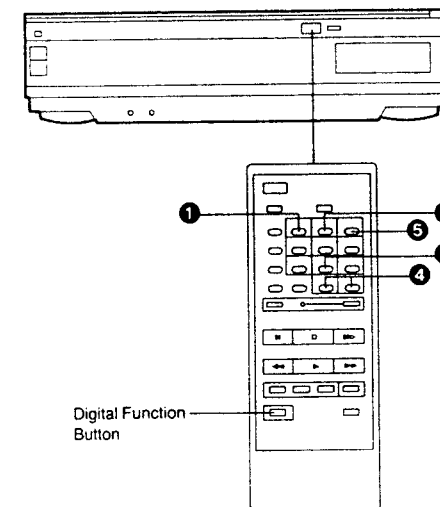
Note:

- The infra-red beam should be transmitted directly at the Infra-red Remote Control Receiver on the front of the VTR.
- Direct sunlight may interfere with the beam.
- The lightsensing angle of the Infra-red Remote Control Receiver window in the VTR is about 60°.
- The unit should be used within a range of about 7 meters from the front of the VTR.

1-3-1. DIGITAL SPECIAL EFFECTS

The special digital picture effects can be enjoyed by using the Remote Controller.

- To operate these digital functions, press the Digital Function Button together with the desired function button on the Remote Controller.



Video Memory Store

This function freezes the playback picture not only of video tapes, but also of TV broadcasts (received with the TV tuner in the VTR) and pictures input from external sources, and gives a still-picture. The reproduction of the sound will continue normally.

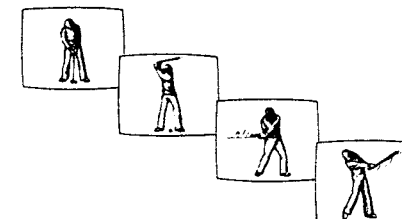
1 Press the F. Store Button to freeze the picture.

5 To return to the normal moving picture, press the Clear Button or F. Store Button.

Strobe

This function makes possible playback with a strobe-picture-like effect.

2 Press the Strobe Button to start the strobe picture effect.



4 The intervals of the strobe can be varied between 1 and 1/2 second by pressing the (+) or (-) Button.

5 To return to the normal moving picture, press the Clear Button or the Strobe Button.

Graphic Effect

This function can be used to give the moving picture an oil-painting-like effect.

3 Press the G. Effect Button.

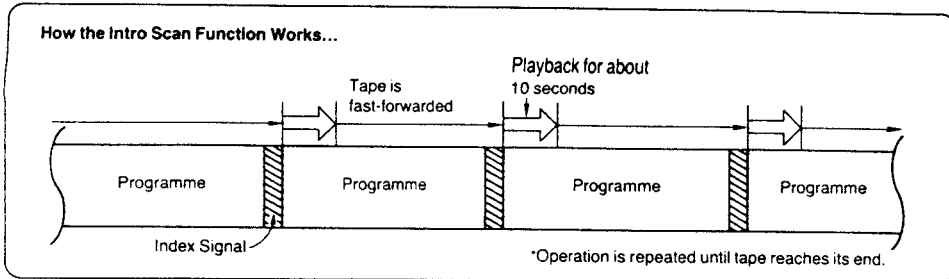


4 The polarizing picture effect can be made stronger or weaker by pressing the (+) or (-) Button.

5 To return to the normal moving picture, press the Clear Button or G. Effect Button.

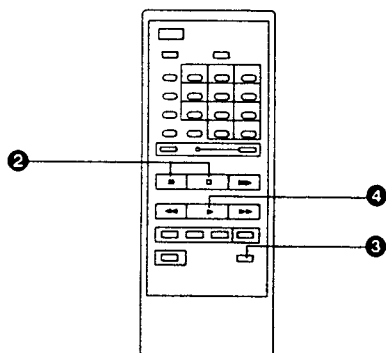
- Of these digital picture effects, only the Graphic Effect mode can be recorded on this VTR.
- During recording, it is not possible to monitor the picture with Strobe effect.
- In the Digital mode, the picture may vibrate vertically. However, this is not due to any malfunction.

1-3-2. INTRO SCAN FUNCTION



The Intro Scan function plays back the first 10 seconds of each programme (recorded with index signal) on a tape one after another. This is convenient for quick checking what programmes are on a tape, or to find the desired instalment of a TV series you have recorded on a tape.

Convenient Intro Scan Operation with the Remote Controller



- 1 Insert a video cassette on which index signals are recorded.
- 2 Put the VTR in the stop mode or the still playback mode.
- 3 Press the Intro Scan Button. ("S" mark will light up in the Multi-Function Display and the Intro Scan will start.)
- 4 When the desired scene is reached, press the Play Button.

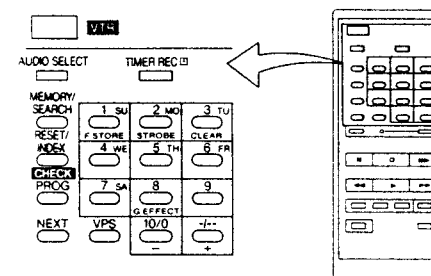
Intro Scan Operation on the VTR

- 1 Insert a video cassette. (Put the VTR in the stop mode.)
- 2 Press the Memory/Search Button twice. ("S" mark appears.)
- 3 Press the Fast Forward ►►/Cue ◀◀ Button. (The Intro Scan starts.)
- 4 When the desired scene is reached, press the Play Button.

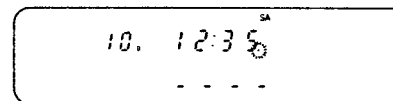
- The Intro Scan function may not be activated for the first programme recorded close to the beginning of the tape.
- During the Intro Scan, if there is a portion without any recording on the tape, the Intro Scan function will be activated at that position to play back the tape for about 10 seconds, and the Intro Scan will then continue.
- The Intro Scan function may not be activated, if the interval between programme starts is less than 5 minutes in the LP mode, or less than 2 minutes in the SP mode.
- If a portion without any recording on the tape continues for more than about 50 minutes in the SP mode, or more than about 90 minutes in the LP mode, the Intro Scan function will be cancelled and the playback will start.

1-3-3. ELECTRONIC LOCK

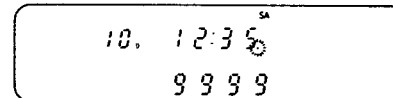
Inputting a Personal Code Number



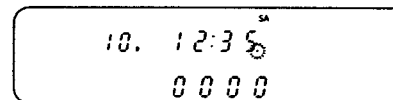
- 1 Press the VTR On/Off Switch to turn the VTR off.
- 2 Press the Next Button.



- 3 Press the number key "9" on the Remote Controller four times.



- 4 Press the Next Button.



- 5 Input a 4-digit personal code number with the Remote Controller.
- 6 Press the Next Button.
 - The "L" indication appears in the Channel Display of the Multi-Function Display.
 - All functions of the VTR are now locked and cannot be operated. To enable normal operation again, the lock must be released as described below.

Releasing the Electronic Lock

- 1 Press the Next Button.
- 2 Input the 4-digit personal code number with the Remote Controller.
- 3 Press the Next Button.
 - The Electronic Lock is now released and the VTR will be turned on.

If you forget the 4-digit personal code number, please refer to the Technical Information at the previous page.

SECTION 2

ADJUSTMENT PROCEDURES

2-1. MECHANICAL ADJUSTMENT PROCEDURES

This Mechanical Chassis of this model NV-D80EG/EV/B is the same as the G Mechanical Chassis. Therefore please refer to the Service Manual G Mechanical Chassis (Order No. VRD8701105).

2-2. DISASSEMBLY METHOD

2-2-1. DISASSEMBLY FLOWCHART

The above flowchart describes the order of steps for removing the cabinet parts and certain printed circuit boards in order to gain access to the items needing servicing. To reassemble the unit, follow the steps in reverse order.

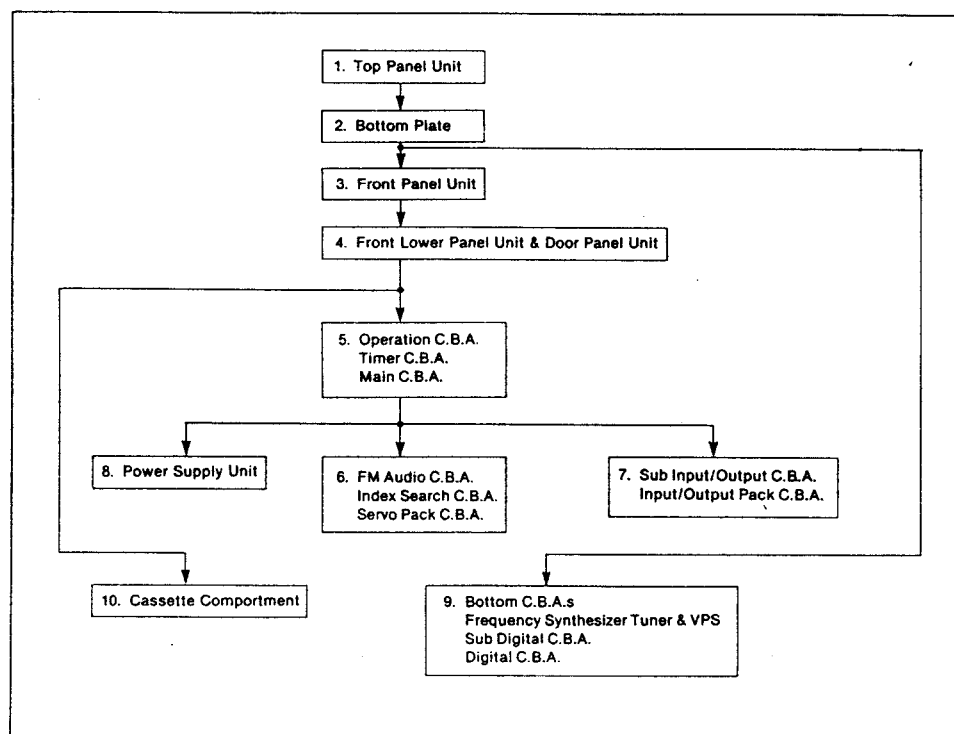


FIG.D1

2-2-2. DETAILED DISASSEMBLY METHOD

1. Removal of the Top Panel Unit

Unscrew 4 screws(A) on the Top Panel Unit and carefully lift the rear of case to remove.

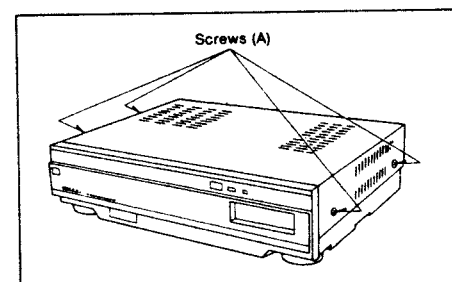


FIG.D2

2. Removal of the Bottom Plate

Unscrew 8 screws(B) and lift off the Bottom Plate.

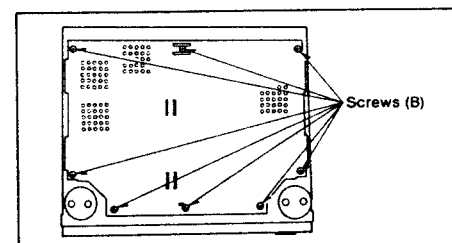


FIG.D3

3. Removal of Front Panel Unit

Open the Door Panel Unit and unscrew 2 screws(C) and then unlock 5 locking portions(D).

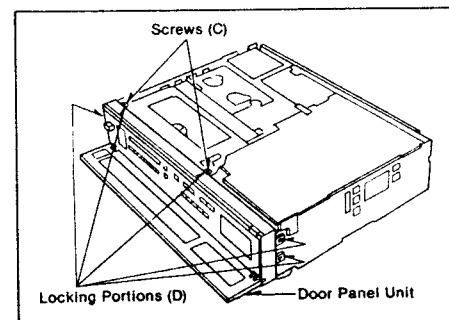


FIG.D4

4. Removal of Front Lower Panel Unit and Door Panel Unit

Unscrew 6 screws(E) and then shut the Door Panel Unit.

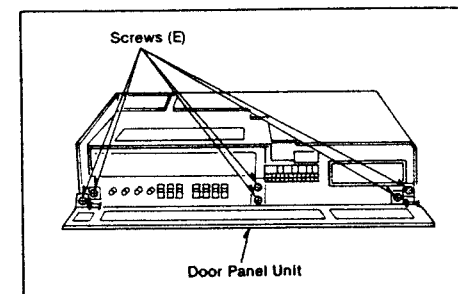


FIG.D5

Unlock 3 locking portions(F). Remove the Front Lower Panel Unit.

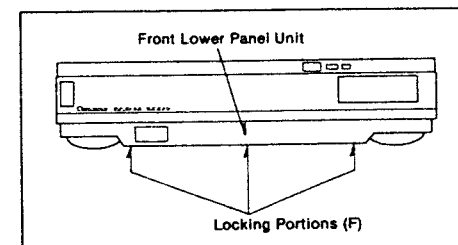


FIG.D6

Unlock the connector lock of P7502 on the Timer C.B.A. and remove the flexible wire. Next, unscrew 3 screws(G) and carefully remove the Door Panel Unit.

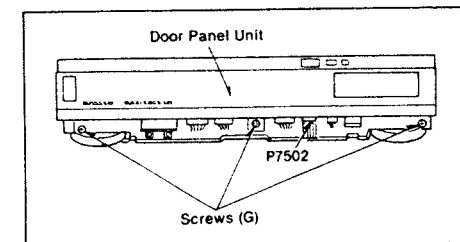


FIG.D7

5. Opening of the Operation C.B.A., Timer C.B.A., Head Phone Jack C.B.A. and Main C.B.A.

Unscrew 7 screws(H) and unlock 6 locking portions(I). Then unlock 2 wire clampers and carefully open the Operation C.B.A., Timer C.B.A. and Head Phone Jack C.B.A.

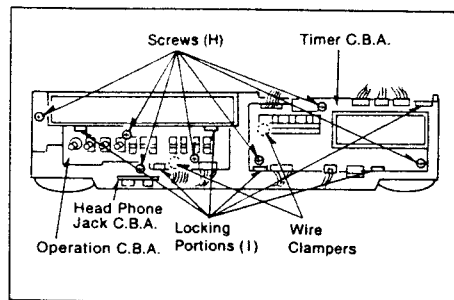


FIG.D8

Unscrew 4 screws(J) on the rear panel.

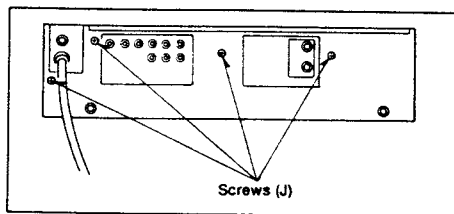


FIG.D9

Unscrew 6 screws(K) on the Main C.B.A. And open the Main C.B.A.

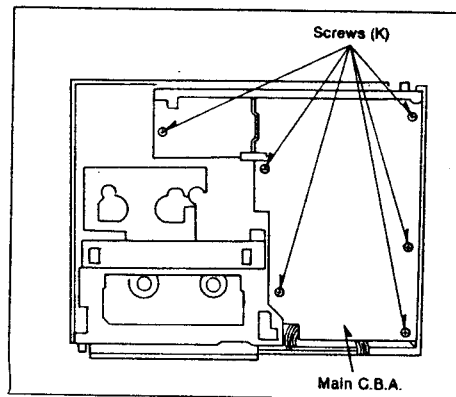


FIG.D10

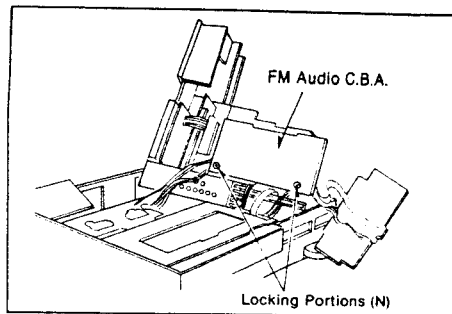


FIG.D11

6. Opening of the FM Audio C.B.A., Index Search and Servo Pack C.B.A.

Unlock 2 locking portions(N) and open up the FM Audio C.B.A. Next, unlock 2 locking portions(O) and open up the Index Search C.B.A.

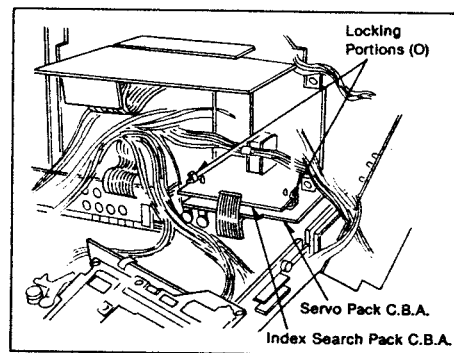


FIG.D12

7. Opening of the Sub Input / Output C.B.A. and Input/Output Pack C.B.A.

Unlock 2 locking portions(P) and open the Sub Input/Output Pack C.B.A.

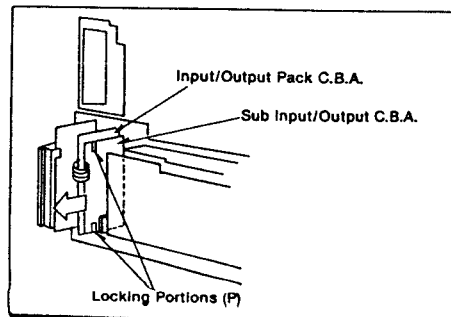


FIG.D13

8. Removal of Power Supply Unit

Remove 2 screws(Q) and take it out from the Main C.B.A. Remove the shield case then checking can be performed.

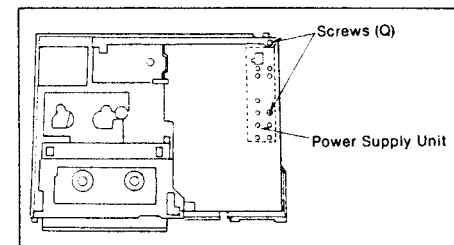


FIG.D14

9. Opening of Bottom C.B.A.s

Unscrew 3 screws(R) and Open the Frequency Synthesizer Tuner & VPS C.B.A. and Sub Digital C.B.A. Next, unscrew 3 screws(S) and remove the shield box.

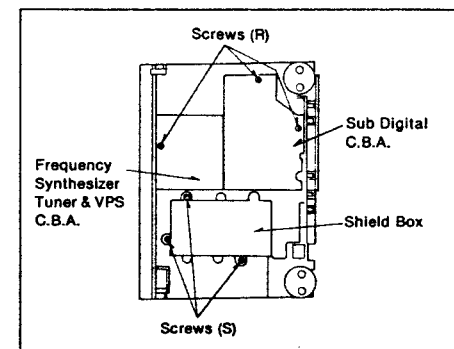


FIG.D15

Then unscrew 2 screws(T) and open the shield cover. And remove the Digital C.B.A.

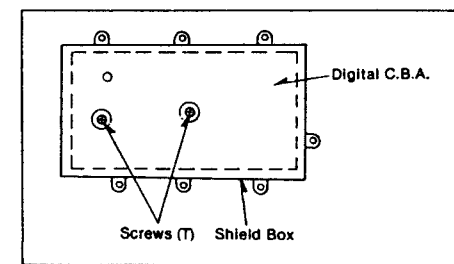


FIG.D16

10. Removal of Cassette Compartment

Remove 2 screws(U) and slide the cassette holder until appearing 2 screws(V) by turning (clockwise) the Capstan Rotor Unit (located in the bottom side) and then remove 2 screws(V). Remove the flexible wire from connector P1503 mounted on Take-up Photo Tr C.B.A., then carefully pull out the Cassette Compartment.

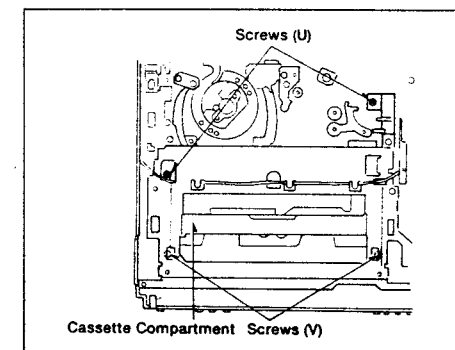


FIG.D17

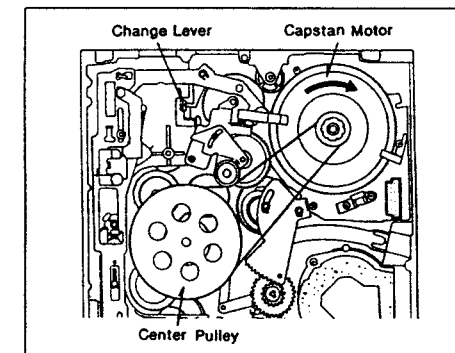


FIG.D18

2-2-3. REINSTALLATION OF CASSETTE COMPARTMENT FROM STOP (FF/REW) POSITION

1. Set the mechanism condition to Stop (FF/REW) position by means of turning capstan motor (refer to 2-2-5.)
2. Remove the 2 screws (W) as shown in FIG. D19.

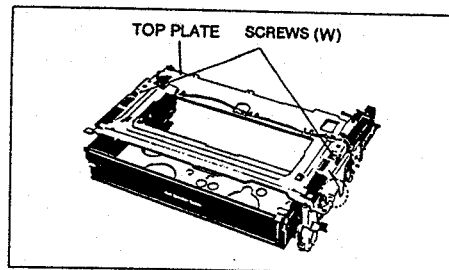


FIG. D19

3. Take the top plate out.
4. Take the cassette Holder unit out as shown in FIG. D20.

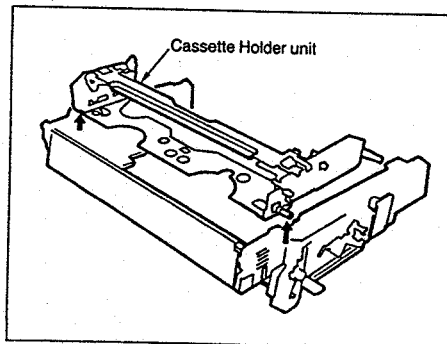


FIG. D20 Removal of cassette holder unit.

5. Press the sub wiper arm (X) to direction indicated by arrow so that the sub wiper arm (R) comes to cassette down position completely as shown in FIG. D21, and keep it.

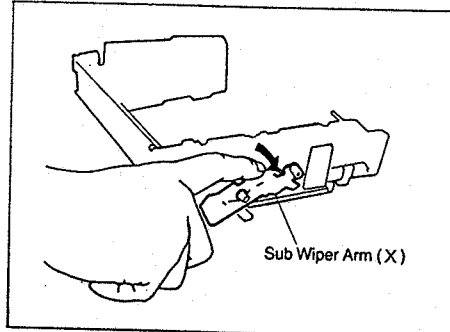


FIG. D21

6. Reinstall the cassette compartment (Without Cassette Holder) to chassis so that the first tip of Rack Gear A (1) comes to Marking slot of connection gear as shown in FIG. D22.

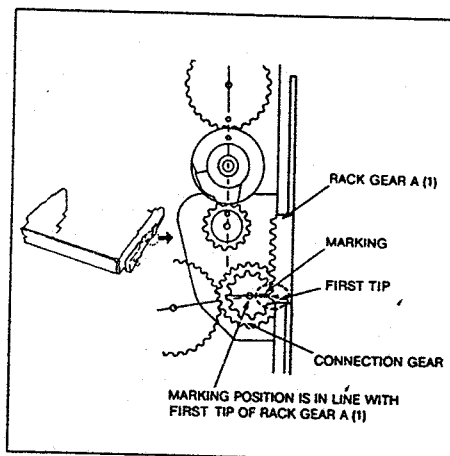


FIG. D22

7. Tighten the 4 screws (Y) as shown in FIG. D23.

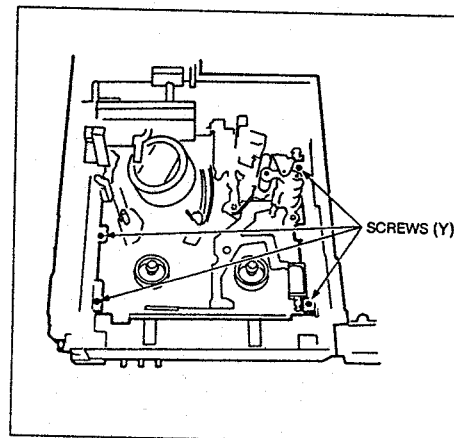


FIG. D23

8. Press the change lever and turn the capstan motor counter clockwise until mechanism is placed to Eject position as shown in FIG. D24.
9. Reinstall the cassette holder unit as just the reverse way of item 4, FIG. D20.
10. Reinstall the top plate as just the reverse way of item 3, FIG. D19.

2-2-4. HOW TO EJECT MANUALLY

If the electrical circuit is defective and the action of unloading and front unloading don't work properly, it is possible to eject manually as follows.

- (1) Take out the Main AC.

- (2) Release the Change Lever by pushing it to arrow mark direction as shown in FIG. D24.
- (3) Turn the capstan motor to counter clockwise slowly until the Clutch Disk is locked. (Clutch Disk is locked once in one rotation)
- (4) Release the Change Lever again when the Clutch Disk is locked.
- (5) Repeat the (2) and (3) until cassette is ejected.

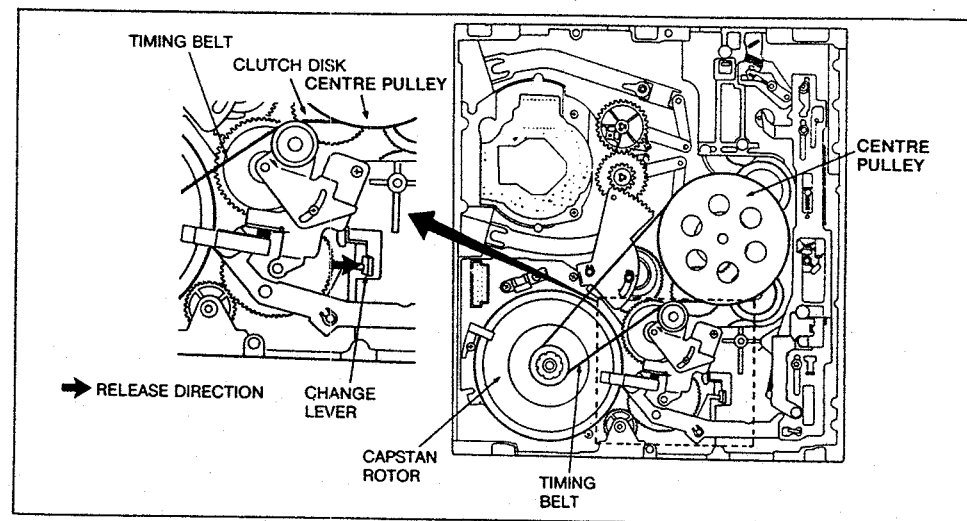


FIG. D24

2-2-5. HOW TO SEE THE MOVEMENT OF MECHANISM WITHOUT CASSETTE COMPARTMENT

Since capstan motor works as loading motor and front loading motor, Phase relationship between cassette compartment and mechanism is important, so Playback and FF/REW can not be performed even just only taking out the cassette compartment, however, if you want to see the mechanical movement without cassette compartment, it is possible as follows.

1. Take out the Main AC.
2. Take out the 5 pin flexible cable from P1503 on the cassette compartment and remove the cassette compartment from chassis. Set the Mechanism to stop (FF/REW) mode as following items 3., 4., 5., 6.
3. Release the change lever by pushing it to arrow mark direction as shown in FIG. D24.
4. Turn the capstan motor to clockwise until the Clutch Disk is locked. (Clutch Disk is locked once in one rotation)
5. Release the change lever again when Clutch Disk is locked.
6. Repeat item 4 and 5 until mechanism come to stop (sub loading) position as shown in FIG. D25. (STOP position is same as FF/REW position, therefore, when you rotate the capstan motor in STOP position, supply or Take up reel table is rotated corresponding with direction of rotation)
7. Turn the power on.
8. Now, any operation can be performed without cassette compartment.

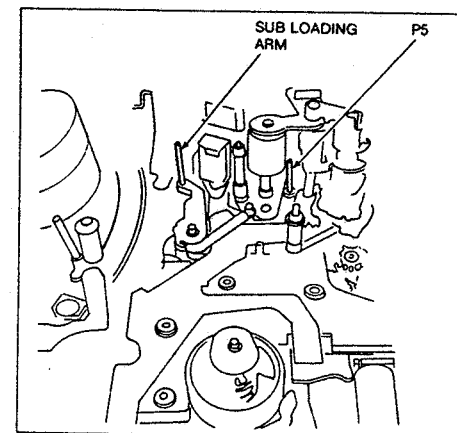


FIG. D25

Note:

- 1) Don't add the large torque to any gears not to break it.
- 2) When reinstalling the cassette compartment, refer to 2-2-3 Reinstallation of Cassette Compartment.
- 3) It is not possible to operate the mechanism from Eject position.

2-3. REPLACEMENT OF THE CYLINDER UNIT

2-3-1. REPLACEMENT OF THE D.D. CYLINDER UNIT

Work with extreme care when removing or replacing the D.D. cylinder unit.
Do not touch the video head during servicing.

1. Remove the 2 screws (a) to take the Head Amp Pack Out.
2. Remove the 1 screw (b) to take the Earth Holder Unit Out.
3. Disconnect the 5P connector on the cylinder drive C.B.A.

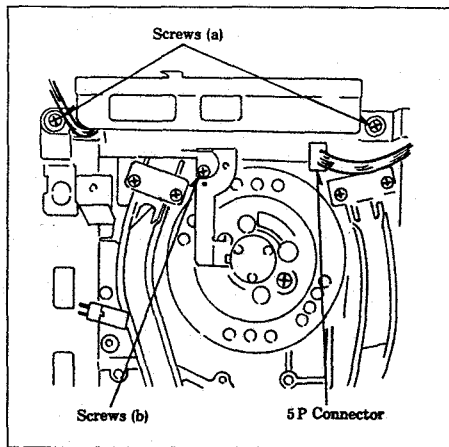


FIG.D26

4. Remove the 3 screws (c) to take the D.D. cylinder unit (with the cylinder drive C.B.A.) out.

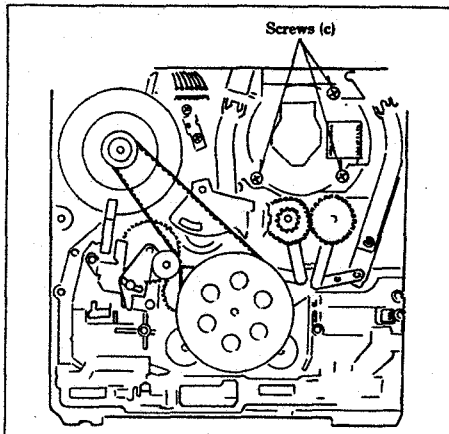


FIG.D27

Note:

Since there is very little clearance between the D.D. cylinder unit and the chassis, remove the D.D. cylinder unit gently and carefully.

5. Reinstall the new D.D. Cylinder Unit, tighten the 3 screws (c) and reinstall the Earth Holder Unit, tighten the 1 screw (b). Then re-connect the Head Amp pack and 5P connector and tighten 2 screws (a).

Note:

- (1) Gently rub the video head in direction of tape travel with Head cleaning stick.
- (2) After replacement, confirm the performance. If any further maintenance is required, perform "TAPE INTER-CHANGE ABILITY ADJUSTMENT".

2-3-2. REPLACEMENT OF THE CYLINDER DRIVE C.B.A.

1. Remove the D.D. cylinder unit referring the Item 2-3-1.
2. Place the D.D. cylinder unit upside down.
3. Unsolder the soldered portion (d) for shield case to take it out.
4. Unsolder the 18 soldered portions (e) indicated by an arrow mark (including 10 soldered portions inside of shield case).
5. Remove the 2 screws (f) to remove the cylinder drive C.B.A. unit.

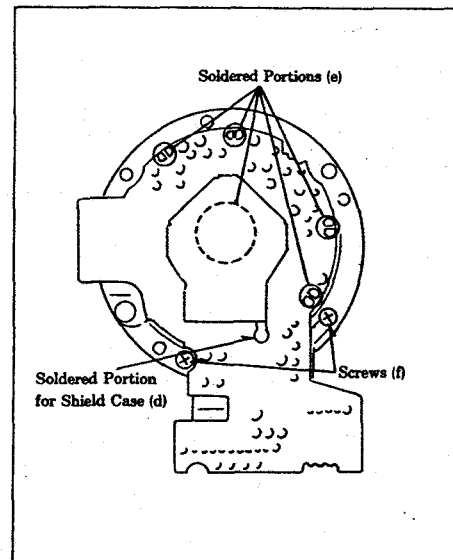


FIG.D28

6. Reinstalling is just reverse way of above procedures.

2-3-3. REPLACEMENT OF THE CYLINDER DRIVE IC

1. Remove the Cylinder Drive C.B.A. as item 2-3-2.
2. Remove the screw (g) to take the heat sink Plate out.
3. Unsolder the 18 soldered portions of the Cylinder Drive IC to take it out.
4. Reinstall the New IC with the care of Pins location.
5. Re-solder the 18 pins of the Cylinder Drive IC.
6. Reinstall the Cylinder Drive C.B.A. to the D.D. Cylinder Unit.

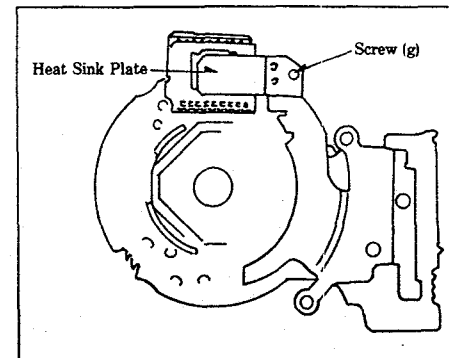


FIG.D29

2-3-4. REPLACEMENT OF THE UPPER CYLINDER UNIT

1. Remove two screws as shown below.
2. Unsolder 12 soldered portions indicated by arrows on the C. Board.
3. Remove the Upper Cylinder Unit by lifting it upward.

Note:

Soldered portion can be easily removed by using solder sucking wire, etc.

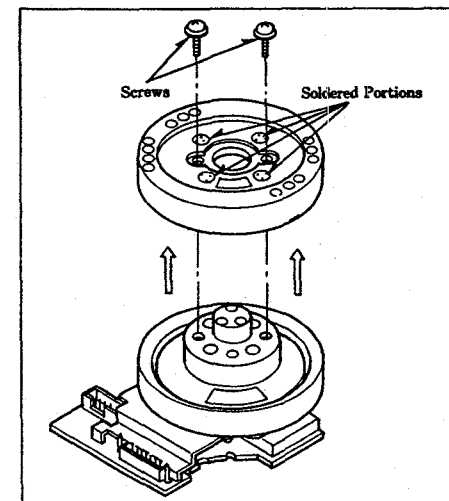


FIG.D30

4. The upper cylinder unit can be reinstalled by reversing the removal procedure, however, when the upper cylinder is reinstalling, be extremely careful so that white portion of C. Board of the upper cylinder correctly matches the white portion of the bottom cylinder as shown below.

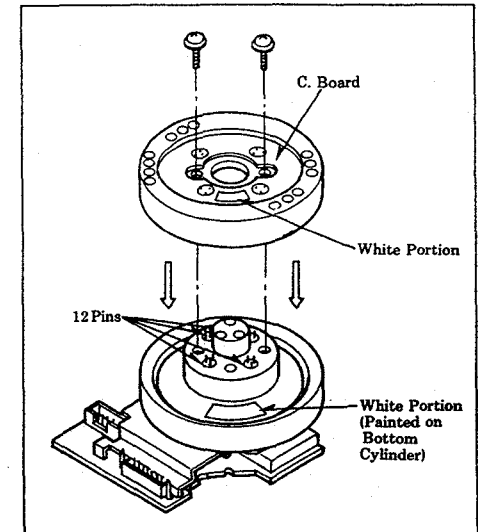


FIG.D31

Note:

- 1). If the Upper Cylinder Unit is reversely installed, no colour would appear when playing back a pre-recorded tape.
- 2). Do not loosen the 3 small screws on the top of the cylinder as shown below. If these 3 screws are loosened, Cylinder motor is broken and not restored.

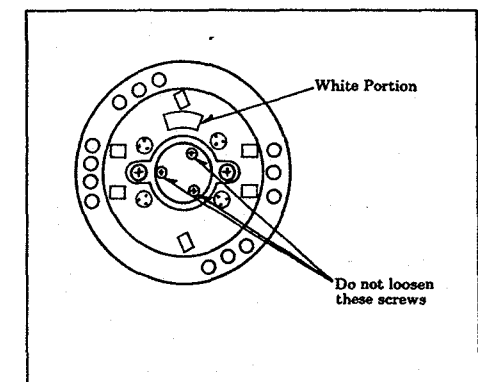


FIG.D32

2.4. ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete electrical adjustment procedures which may be required for electronic circuits of VHS Video Cassette Recorders NV-D80EG/EV/B

2.4.1. TEST EQUIPMENTS

To perform the electrical adjustments completely, following equipments are required.

1. VTVM (Vacuum Tube Volt Meter) or DVM (Digital Volt Meter)
Voltage Range: 0.001~50V
2. Dual-Trace Oscilloscope
Voltage range: 0.005~50V/div.
Frequency Range: DC~30MHz
Probes: 10:1
3. Frequency counter
Frequency Range: 0~10MHz
4. Signal Generator (Sinewave)
Frequency Range: 0~500KHz
5. Video Sweep Generator
Frequency Range: 0~10MHz
6. Colour Monitor TV
7. Plastic Tip Driver
8. VHS Alignment Tape (VFJ8125H3F)
9. Pattern Generator

2.4.2. HOW TO READ THE ADJUSTMENT PROCEDURES

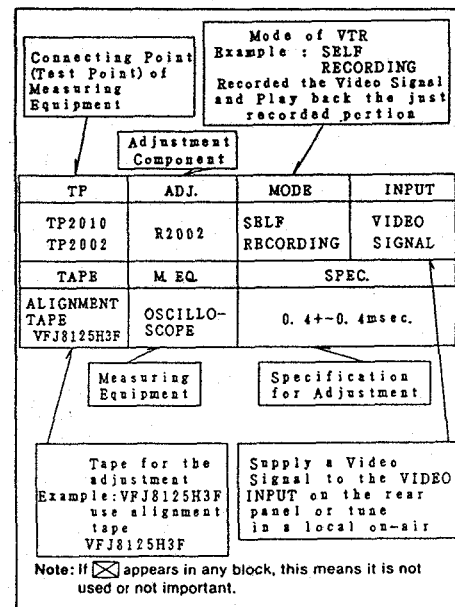


FIG.E1

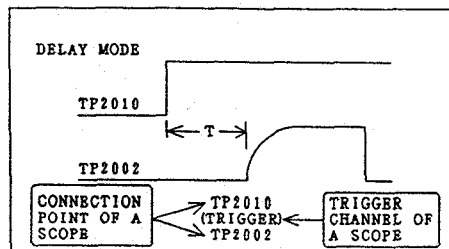


FIG.E2

Note:

Before the electrical adjustment, set the VHS VTR as following conditions except for especial instructions in each adjustment item.

- 1) Tracking Control VR — Centre FIX Position
- 2) Picture Sharpness VR — Centre FIX Position
- 3) RF Signal Level SW (Except NV-D80EG) — HIGH
- 4) Colour / Test Signal SW — AUTO
- 5) Input Selector SW — LINE
- 6) Timer Record Button — OFF
- 7) EDIT SW — OFF
- 8) DBS SW (Only For NV-D80EG) — OFF
- 9) Recording SW — SP
- 10) Digital NR SW — OFF
- 11) Audio Rec Level Control Selector — AGC
- 12) Oscilloscope-Probe — 10:1 Probe

SERVO SECTION

2.4.3. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 TP3002	VR2001	PLAY	
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO- SCOPE	7.0±0.5H	

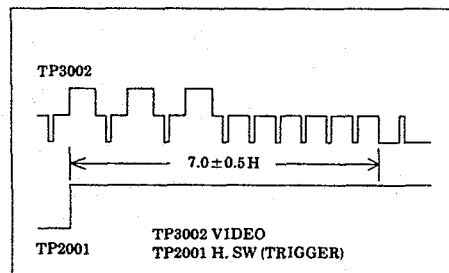


FIG.E3

2.4.4. TRACKING FIX ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 TP2002	VR2002	SELF RECORDING	VIDEO SIGNAL (COLOUR BAR)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO- SCOPE	T=1.6±0.4msec.	

1. Tracking VR is in centre fix position.
2. Record video signal.
3. Playback the just recorded portion.
4. Adjust VR2002 so that the period of "T" becomes 1.6 ± 0.4msec as shown below.

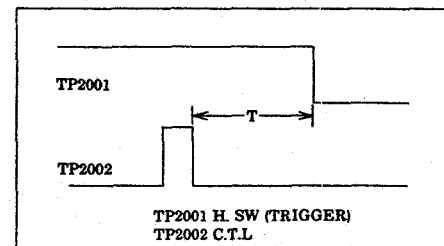


FIG.E4

2.4.5. SLOW FREE RUN ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2015	VR2013	STILL	VIDEO SIGNAL (COLOUR BAR)
TAPE	M. EQ.	SPEC.	
BLANK TAPE (60min type)	FREQUENCY COUNTER	453±15Hz	

1. Record video signal and play back the just recorded portion. Then place the unit in STILL mode.
2. Connect the jumper wire between TP2025 and GND.
3. Connect the jumper wire between TP2026 and GND.
4. Connect the frequency counter to TP2015.
5. Adjust the VR2013 so that the reading of the Frequency Counter is 453 ± 15Hz.

2.4.6. SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2020 TP2001	VR2011 (SP) VR2006 (LP)	SLOW	VIDEO SIGNAL (COLOUR BAR)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO- SCOPE	T=20.0±2.0msec. (SP) T=16.0±2.0msec. (LP)	

1. SLOW TRACKING VR is in centre fix position.
2. Play back the just recorded portion in SLOW mode.
3. Adjust the volume (VR2011, VR2006) as shown below.

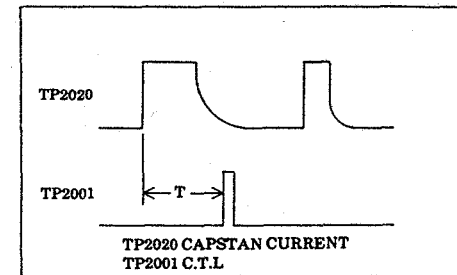


FIG.E5

2.4.7. ARTIFICIAL V-SYNC ADJUSTMENT

TP	ADJ.	MODE	INPUT
TV MONITOR	VR2010	STILL	VIDEO SIGNAL (MONO SCOPE)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	TV MONITOR	NO V-DANCING	

1. Play back the just recorded portion and Place the unit in STILL mode.
2. Adjust VR2010 on the Servo pack so that the V-dancing does not appear on the TV Monitor as shown below.
3. Confirm that the V-dancing does not appear in cue and Review modes. If the V-dancing is appeared on the TV Monitor, this adjustment should be repeated again.

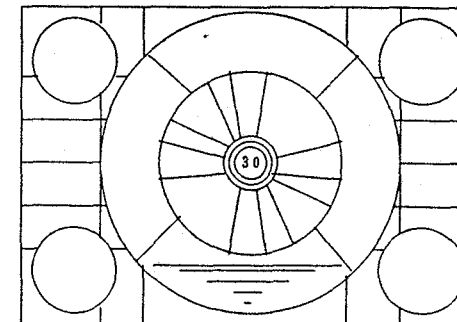


FIG.E6

LUMINANCE, CHROMINANCE & HEAD AMP SECTION

2-4-8. CHROMINANCE & LUMINANCE RECORDING CURRENT ADJUSTMENT

* CHROMINANCE RECORDING CURRENT ADJ.

TP	ADJ.	MODE	INPUT
TP503 (HOT) TP504 (GND)	VR502	RECORDING	VIDEO SIGNAL (COLOUR BAR)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLOSCOPE	$24 \pm 3 \text{ mVp-p}$	

1. Connect the oscilloscope to TP503 (HOT) and TP504 (GND).
2. Before Chrominance recording current adjustment Luminance recording current must be closed to observe the chrominance signal. (VR501 is minimum position.)
3. Adjust VR502 for $24 \pm 3 \text{ mVp-p}$ as shown below.

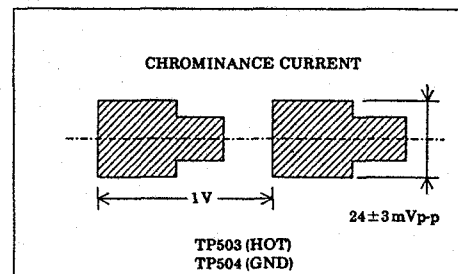


FIG.E7

* LUMINANCE RECORDING CURRENT ADJ.

TP	ADJ.	MODE	INPUT
TP503 (HOT) TP504 (GND)	VR501	RECORDING	VIDEO SIGNAL (COLOUR BAR)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLOSCOPE	$90 \pm 5 \text{ mVp-p}$	

4. After chrominance recording current adjustment, adjust VR501 for $90 \pm 5 \text{ mVp-p}$ as shown below.

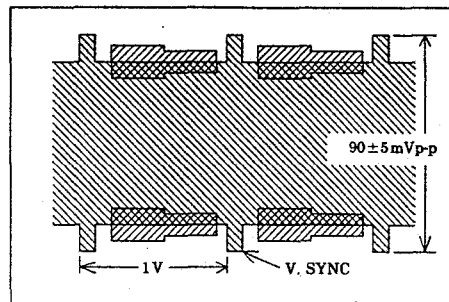


FIG.E8

2-4-9. HEAD AMP FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
LINE OUT (TP3002)	VR3012 (SP) VR3013 (LP)	SELF RECORDING	VIDEO SWEEP
TAPE	M. EQ.	SPEC.	
BLANK TAPE	VIDEO SWEEP/ OSCILLOSCOPE	A: $0 \pm 1 \text{ dB}$ (SP) A: $-2 \pm 1 \text{ dB}$ (LP)	

1. Set the sweep generator output as shown below.

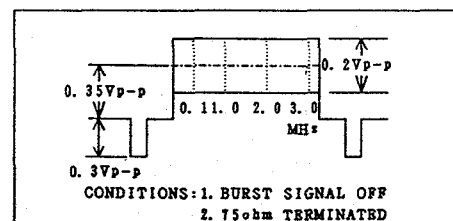


FIG.E9

2. Picture VR is in centre fix position.
3. Play back the just recorded portion.
4. Adjust the volume (VR3012, VR3013) so that the level at 2MHz (A) becomes within specification comparing with the level at 0.1MHz as shown below.

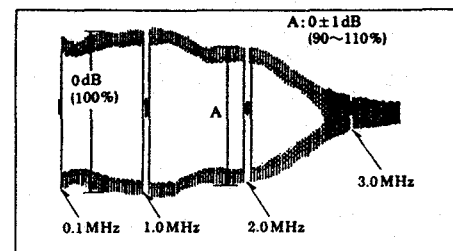


FIG.E10

2-4-10. HQ AMP GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
LINE OUT (TP3002)	VR301	STOP	VIDEO SIGNAL (COLOUR BAR)
TAPE	M. EQ.	SPEC.	
	OSCILLOSCOPE	$1.0 \pm 0.1 \text{ Vp-p}$	

1. Set the Tape Speed Selector to "LP" position.
2. Connect the oscilloscope to video Line out (TP3002).
3. Adjust VR301 so that the video level is $1.0 \pm 0.1 \text{ Vp-p}$ as shown below.

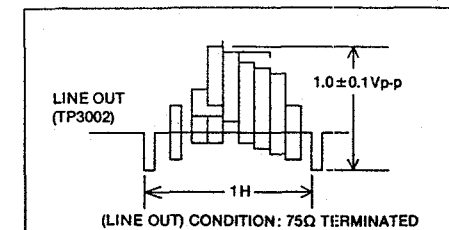


FIG.E11

2-4-11. YNR BALANCE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC302-20	VR302	STOP	VIDEO SIGNAL (COLOUR BAR)
TAPE	M. EQ.	SPEC.	
	OSCILLOSCOPE	WAVEFORM IS MINIMIZED	

1. Connect the oscilloscope to pin20 of IC302 on the Luminance & Chrominance C.B.A.
2. Adjust VR302 so that the waveform is minimized as shown below.

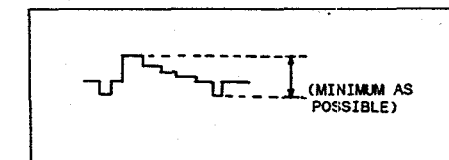


FIG.E12

Note:
Prior to the above adjustment, the HQ Amp Gain adjustment should be always completed.

2-4-12. CHROMA RECURSIVE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC302-7	VR801 VR802	SELF RECORDING	VIDEO SIGNAL (COLOUR BAR)
TAPE	M. EQ.	SPEC.	
	OSCILLOSCOPE	WAVEFORM IS MINIMIZED	

1. Play back the just recorded portion.
2. Connect the oscilloscope to pin7 of IC302 on the Luminance & Chrominance C.B.A.
3. Adjust VR801 and VR802 mutually so that the chrominance waveform is minimized as shown below.

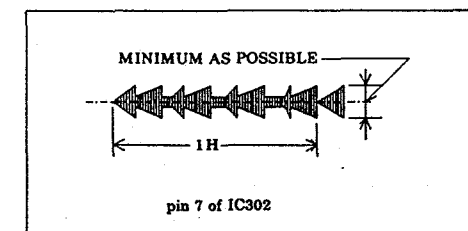


FIG.E13

2-4-13. PLAYBACK CHROMA CYAN LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
LINE OUT (TP3002)	VR803	SELF RECORDING	VIDEO SIGNAL (COLOUR BAR)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLOSCOPE	$0.55 \pm 0.05 \text{ Vp-p}$	

1. Play back the just recorded portion.
2. Adjust VR803 for $0.55 \pm 0.05 \text{ Vp-p}$ as shown below.

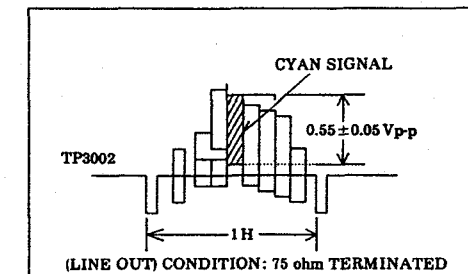


FIG.E14

2-4-14. SECAM KILLER ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC851-11	T851	SELF RECORDING	SECAM VIDEO SIGNAL
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLOSCOPE	MINIMUM AS POSSIBLE	

Note:
To make this adjustment, please set the SECAM Pack as shown below.

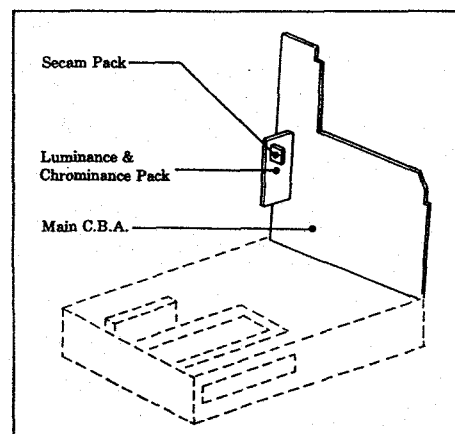


FIG.E15

- First, remove the SECAM Pack from the Luminance & Chrominance Pack. Next, reinstall the SECAM Pack to Luminance & Chrominance Pack on foil side. Finally solder the soldering portions of the SECAM Pack.

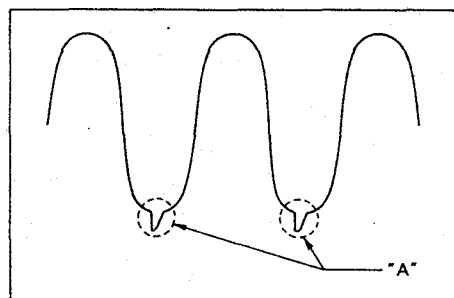


FIG.E16

- Adjust T851 so that the points "A" becomes maximum on the waveform.

NORMAL AUDIO SECTION

2-4-15. AUDIO BIAS CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4002 (HOT) TP4003 (GND)	VR4002	RECORDING	
TAPE	M. EQ.	SPEC.	
BLANK TAPE	V.T.V.M.	2.6±0.1mVrms	

2-4-16. AUDIO PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
AUDIO OUT (TP4001)	VR4001	SELF RECORDING	1kHz, -10dB AUDIO SIGNAL
TAPE	M. EQ.	SPEC.	
BLANK TAPE	SIGNAL GENERATOR/ V.T.V.M.	E-E LEVEL = -8±2dB PLAYBACK LEVEL = E-E LEVEL ±0.5dB	

- Set the Audio Mode Selector Playback to NORMAL position. (Both the Left and Right Indicators are not lit.)
- Playback the just recorded portion.
- Adjust VR4001 so that the level of the playback waveform becomes E-E level ±0.5dB.

Note:
1. Before this adjustment, "Tape Interchangeability Adjustment" and "Audio Bias Current Adjustment" must be completed.
2. Video signal must be connected to video input.

FM AUDIO SECTION

2-4-17. LEVEL METER SENSITIVITY ADJUSTMENT

TP	ADJ.	MODE	INPUT
	VR4004 (L) VR4005 (R)	STOP	1kHz, -10dB
TAPE	M. EQ.	SPEC.	
	SIGNAL GENERATOR		

- Set the Audio Playback Mode Selector to STEREO position. (Both the Left and Right Indicators are lit.)
- Set the AUDIO Rec Level Control Selector to MANUAL position.

- Set the output of the Signal Generator to 1KHz and -10dB, and supply it to both Input Jacks (L) and (R).
Next, Adjust the recording volume with the Audio Rec Level Controls so that the audio outputs are 400mVp-p at both Output Jacks (L) and (R).
- Adjust VR4004 so that the 0dB indicator just lights up on the L-ch level meter as shown below.
- Adjust VR4005 so that the 0dB indicator just lights up on the R-ch level meter as shown below.

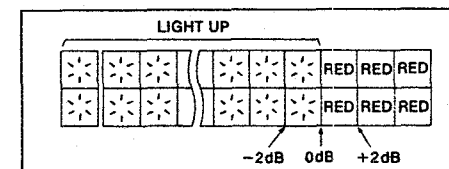


FIG.E17

2-4-18. FM AUDIO RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4507 (HOT) SHIELD CASE (GND)	VR4503	RECORDING	
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLOSCOPE	220±10mVp-p	

- Set the Audio Playback Mode Selector to "STEREO" position. (Both the Left and Right Indicators are lit.)
- Connect the OSCILLOSCOPE to TP4507 (HOT) and SHIELD CASE (GND).
- Adjust VR4503 so that the Audio recording current become 220±10mVp-p as shown below.

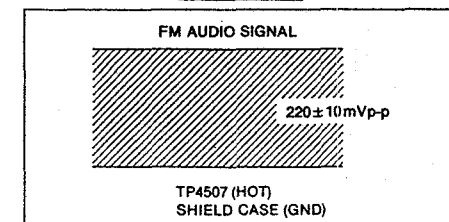


FIG.E18

2-4-19. AUDIO HEAD SWITCHING SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4511 TP2001	VR4510	PLAY	
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE VFJ8125H3F	OSCILLOSCOPE	$T = T_2 - \left(\frac{T_2 - T_1}{2} \right) \text{ msec.}$	

- Play back the alignment tape (VFJ8125H3F).
- Connect the oscilloscope to TP4511 and TP2001.
- Play back the just recorded portion.
- Adjust VR4510 while listening to the stereo playback sound.
 - Confirm the "T2" time when the abnormal sound just occurs during turning clockwise on VR4510.
 - Confirm the "T1" time when the abnormal sound just occurs during turning counter clockwise on VR4510.
 - Adjust VR4510 so that the falling edge "T" of Audio H.S.W pulse becomes the center portion of the both "T2" and "T1".

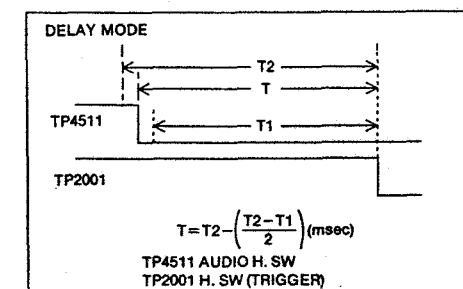


FIG.E19

2-4-20. AUDIO MUTING ADJUSTMENT

TP	ADJ.	MODE	INPUT
	VR4505	SELF RECORDING	
TAPE	M. EQ.	SPEC.	
BLANK TAPE			

Note:
Before this adjustment "Tape Interchangeability Adjustment" must be completed.

- Set Audio Playback Mode Selector to STEREO position. (Both the Left and Right Indicators are lit.)
- Set the Audio Level Meter Selector to Tracking mode.
- Set the Tracking VR so that the Audio Tracking level becomes maximum.
- Preadjust VR4505 until the Hi-Fi indicator on the front panel display turns the NORMAL indication.
- Then slowly adjust VR4505 where the STEREO indication just lights up.
- Confirm that the abnormal sound does not contain in the playback Hi-Fi sound.

2-4-21. FM AUDIO CARRIER FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4507 (HOT) SHIELD CASE (GND)	VR4501 (L) VR4509 (R)	STOP	
TAPE	M. EQ.	SPEC.	
	FREQUENCY COUNTER	1400 ± 3kHz (L) 1800 ± 3kHz (R)	

2-4-22. AUDIO DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4502-5 (L) IC4502-26 (R)	VR4502 (L) VR4507 (R)	RECORDING	1kHz, -10dB (316mVp-p) AUDIO SIGNAL
TAPE	M. EQ.	SPEC.	
BLANK TAPE	SIGNAL GENERATOR/ D.V.M.	280mVp-p	

- Set the Audio Rec Level Control Selector to MANUAL position. (Both the left and Right Indicators are not lit.)
- Set the output of the Signal generator to 1KHz and -10dB, and supply it to both input Jacks (L) and (R).
Next, adjust the recording with the Audio Rec Level Controls so that the audio outputs are 400mVp-p at both Output Jacks (L) and (R).
- Adjust VR4502 to 280mVp-p at IC4502-5 on FM AUDIO C.B.A. for L-Channel.
- Adjust VR4507 to 280mVp-p at IC4502-26 on FM AUDIO C.B.A. for R-Channel.

2-4-23. AUDIO PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
LINE OUT (TP3002)	VR4504 (L) VR4508 (R)	SELF RECORDING	SIGNAL GENERATOR (1kHz, -10dB)/ VIDEO SIGNAL
TAPE	M. EQ.	SPEC.	
BLANK TAPE	SIGNAL GENERATOR/ V.T.V.M	E-E LEVEL = -8 ± 2dB PLAYBACK LEVEL = E-E LEVEL ± 0.5dB	

Note:
Before this adjustment, Tape Interchangeability Adjustment must be completed.

- Play back the just recorded portion.
- Adjust VR4504 and VR4508 volumes one by one, so that the level of the playback becomes E-E level ± 0.5dB.

DIGITAL SECTION

2-4-24. JUMP VCO FREE RUN ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC3304-10	VR3312	STOP	
TAPE	M. EQ.	SPEC.	
	FREQUENCY COUNTER	31.25 ± 0.3kHz	

- Connect a jumper wire between IC3304-8 and 9.
- Connect the Frequency Counter to pin 10 of IC3304 through the amplifier as shown below.

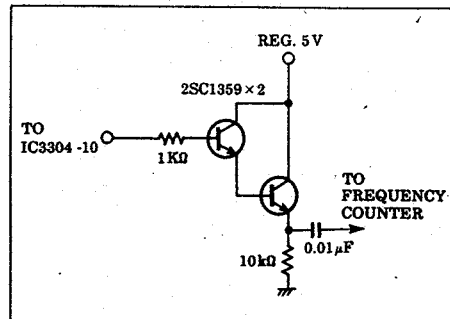


FIG.E20 Amplifier Circuit

- Adjust VR3312 so that the reading of Frequency Counter is 31.25 ± 0.3KHz.

2-4-25. CHROMA DELAY LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
LINE OUT (TP3002)	VR3309	DIGITAL STILL	VIDEO SIGNAL (COLOR BAR)
TAPE	M. EQ.	SPEC.	
BLANK	OSCILLOSCOPE	FLICKER IS MINIMIZED (GREEN)	

- Place the unit in Digital Still mode by using Programmable Remote Control Unit.
- Connect the Oscilloscope to Video Line Output.
- Adjust VR3309 so that the flickering of the chrominance signal is minimized as possible.

Note:
The flickering can be observed especially at the green part of the chrominance signal.

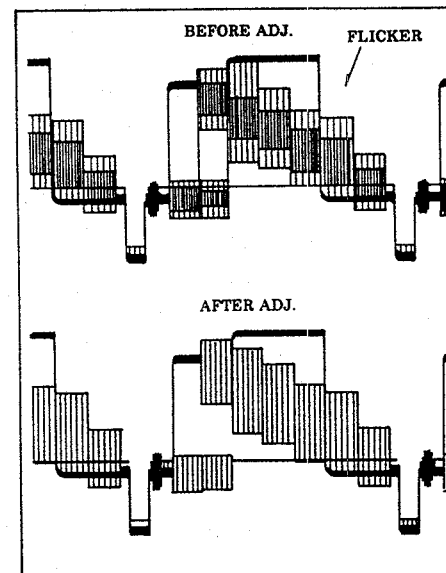


FIG.E21

2-4-26. H-SYNC MMV1 ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC9501-12 IC9501-13	VR9501	STOP	VIDEO SIGNAL
TAPE	M. EQ.	SPEC.	
	OSCILLOSCOPE	3 ± 0.2μsec.	

- Connect the Oscilloscope to IC9501-12(CH-1) and IC9501-13(CH-2).
- Adjust VR9501 to 3 ± 0.2μsec. as shown below.

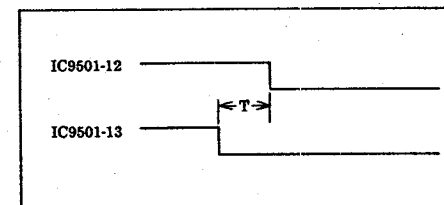


FIG.E22

2-4-27. H-SYNC MMV2 ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC9503-4 IC9503-5	VR9502	STOP	VIDEO SIGNAL
TAPE	M. EQ.	SPEC.	
	OSCILLOSCOPE	3 ± 0.2μsec.	

- Connect the Oscilloscope to IC9503-4(CH-1) and IC9503-5(CH-2).
- Adjust VR9502 to 3 ± 0.2μsec. as shown below.

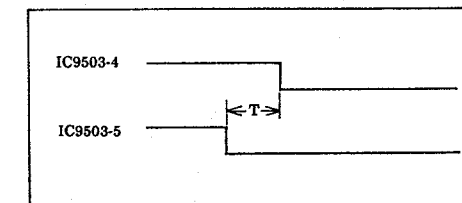
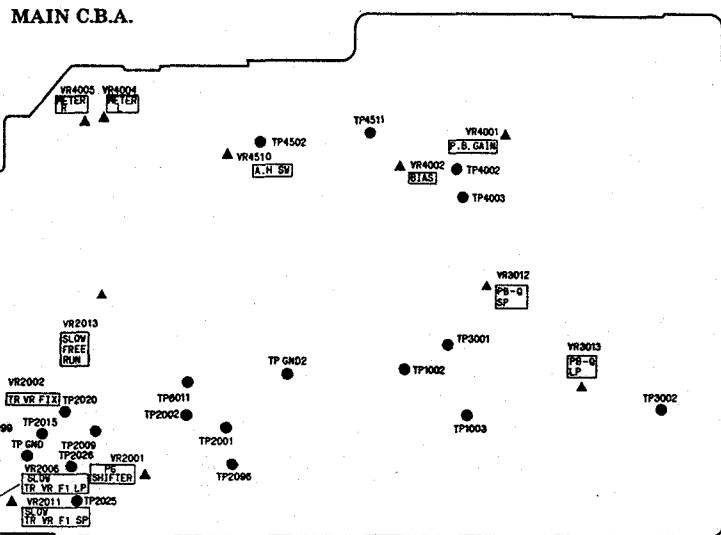
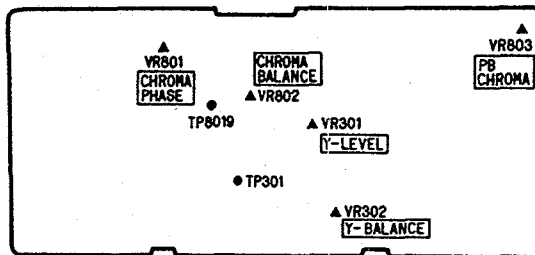
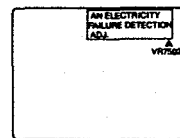


FIG.E23

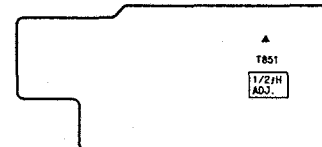
LOCATION OF TEST POINTS & CONTROLS - 1 -

**LUMINANCE & CHROMINANCE PACK C.B.A.**

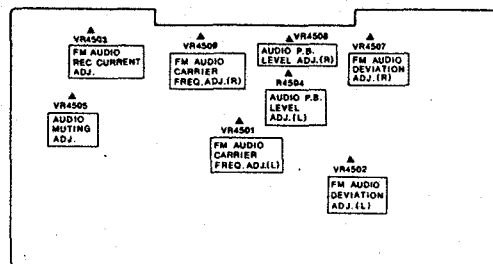
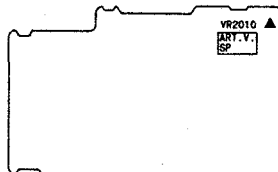
CH SELECT PACK C.B.A.



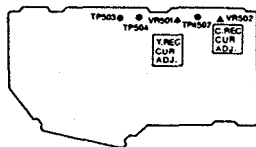
SECAM PACK C.B.A.



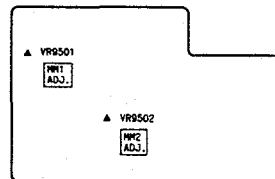
FM AUDIO C.B.A.

**SERVO PACK C.B.A.**

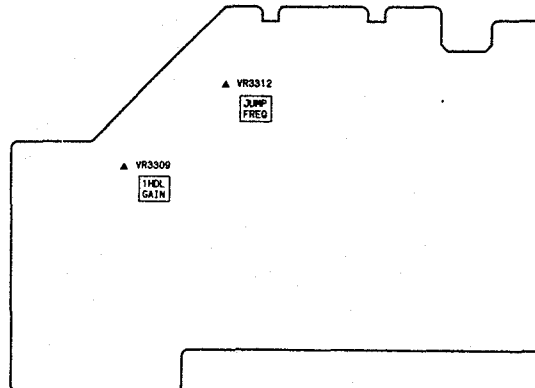
HEAD AMP C.B.A.



SYNC GENERATOR C.B.A.

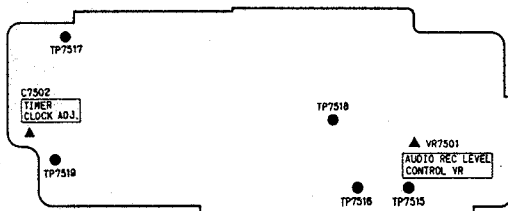


SUB DIGITAL C.B.A.

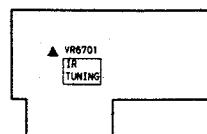


LOCATION OF TEST POINTS & CONTROLS — 2 —

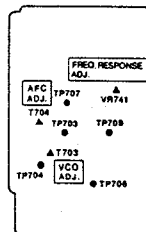
TIMER C.B.A.



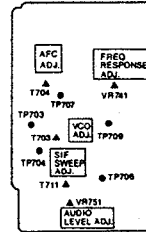
IR RECEIVER C.B.A.



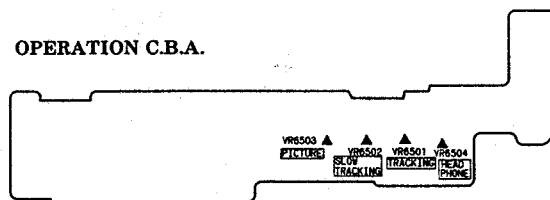
TV DEMODULATOR C.B.A. (NV-D80EG/EV)



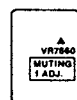
TV DEMODULATOR C.B.A. (NV-D80B)



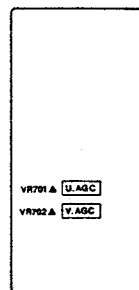
OPERATION C.B.A.



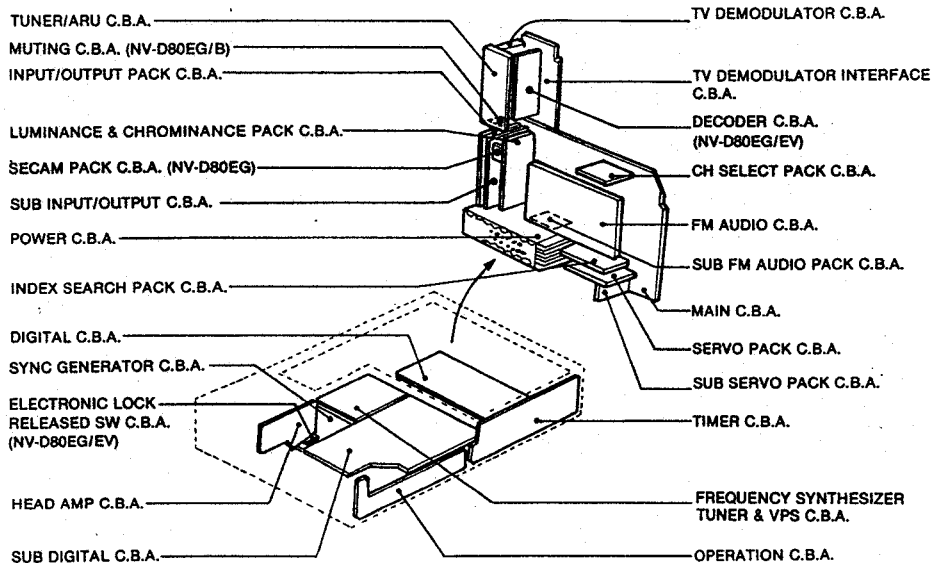
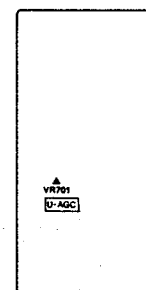
MUTING C.B.A.



TUNER/ARU C.B.A. (NV-D80EG)



TUNER/ARU C.B.A. (NV-D80B)



TIMER SECTION

2-4-28. AN ELECTRICITY FAILURE DETECTION ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC7551-(12)	VR7502		
TAPE	M. EQ.	SPEC.	
	OSCILLOSCOPE/ 2 DC POWER SUPPLIES		

Note:

- Do not connect the AC power plug.
- Make a short circuit at C7571 to discharge. (refer to the Technical Information)
- Set the voltage of the DC power supply (A) for $4.6 \pm 0.05V$ and supply to IC7551-8 (+) and GND (-).
- Set the voltage of the DC power supply (B) for $45 \pm 1V$ and supply to the Channel Select Pack C.B.A. -15.
- Turn the VR7502 until the voltage at IC7551-(12) is High Level.
- Turn the VR7502 slowly until the voltage at IC7551-(12) is Low Level (0V).
- Change the voltage of the DC power supply (A) from $4.6 \pm 0.05V$ to $4.8 \pm 0.05V$.
- Confirm the voltage at IC7551-(12) is High Level.

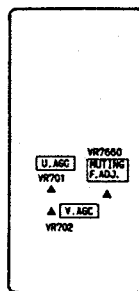
2-4-29. TIMER CLOCK ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC7501-(41)	C7502		
TAPE	M. EQ.	SPEC.	
	FREQUENCY COUNTER		$3906.25 \pm 0.008 \mu s$

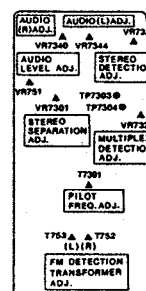
Note:

- Do not connect the AC power plug.
- Make a short circuit at C7571 to discharge. (refer to the Technical Information)
- Set the voltage of the DC power supply for $5.8V \pm 0.1V$ and supply it to P7506-6 (+) and GND (-).
- Connect a jumper wire between P7506-5 and GND.
- Connect the frequency counter to IC7501-41.
- Adjust C7502 for $3906.25 \mu s \pm 0.008 \mu s$.

TUNER/ARU C.B.A. (NV-D80EV)



DECODER C.B.A.



TP	ADJ.	MODE	INPUT
IC7651(4)	VR7660		
TAPE	M. EQ.	SPEC.	
	FREQUENCY COUNTER	15.625 ± 0.05 kHz	

IC7651
- (4)

100Kohm

1Kohm

2SC2377

10Kohm

0.01uF

TO
REG. 12V

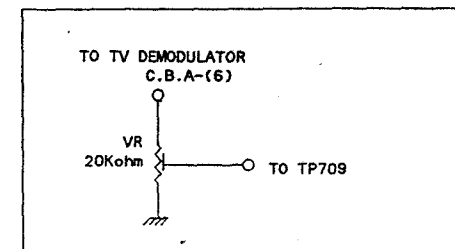
TO
FREQUENCY
COUNTER

TV DEMODULATOR SECTION

1. VIF SWEEP GENERATOR with the Trap Adjustor
.....38.9MHz (EG/EV)
.....39.5MHz (B)
2. SIF SWEEP GENERATOR
.....5.5MHz $\pm$ 150KHz (EG/EV)
.....6.0MHz $\pm$ 150KHz (B)
3. CW OSCILLATOR
.....38.9MHz $\pm$ 100KHz (EG/EV)
.....39.5MHz $\pm$ 100KHz (B)
4. MONITOR SCOPE
5. OSCILLOSCOPE
6. DIGITAL VOLT METER
7. TUNING AMPLIFIER
8. MULTI VOICE MODULATOR (M.V.M)

Diagram illustrating the rear panel layout of the NV-D80EG/B receiver, showing the internal components and their connections:

- INTERFACE C.B.A.** (Control Board Assembly)
- MAIN C.B.A.** (Main Control Board Assembly)
- DECODER C.B.A. (EXCEPT NV-D80B)**
- MUTING C.B.A. (NV-D80EG/B)**
- TUNER ARU C.B.A.**
- TUNER**
- TUNER TP** (Tuner Tuning Pin)
- RF CONVERTER**
- TUNER CONVERTER COIL**
- DEMODULATOR C.B.A.**



2-18

DECODER SECTION (NV-D80 EG, EV Only)

2-4-37. TEST EQUIPMENTS

To make adjustment completely, following equipments are required.

1. Digital Volt Meter (D.V.M)
2. Oscilloscope
3. Multi Voice Modulator (M.V.M)
4. Frequency counter
5. Noise meter
6. Distortion Meter

Note:

1. To make this adjustment, set the Demodulator Unit as shown in FIG.E25.

2. If output of M.V.M is not indicated, output must be follows.

CH: E10 (Philips Pattern)
Video Modulation: 87.5%
Output: 75dBu
Audio: 1KHz, 100% modulation
(30KHz DEV.)

2-4-38. FM DETECTION TRANSFORMER ADJUSTMENT

TP	ADJ.	MODE	INPUT
DECODER C.B.A. (11):(L) (12):(R)	T753 (L) T752 (R)		M.V.M (CHE10)
TAPE	M. EQ.	SPEC.	
	M.V.M/ OSCILLO- SCOPE/ PATTERN GENERATOR /DISTORTION METER	DISTORTION RATE (L) Less than 1.8% (R) Less than 1.0% OUTPUT LEVEL: MAXIMUM	

1. Supply a video signal (PHILIPS pattern) from the pattern generator to the input of the M.V.M.
2. Connect the output of the M.V.M to RF input of the Deck.
3. Press the SEARCH / FINE button so that the modulated RF signal on the channel E10 is able to receive.
4. Set the AFC ON condition.
5. Connect the oscilloscope and distortion meter to Decoder C.B.A-(11).
6. Adjust T753 so that the output level on the oscilloscope becomes maximum and distortion meter becomes MINIMUM.
7. Connect the oscilloscope and distortion meter to Decoder C.B.A-(12).
8. Adjust T752 so that the output level on the oscilloscope becomes maximum becomes MINIMUM.

2-4-39. SOUND MULTIPLEX DETECTION ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP7303 TP7304	VR7326 VR7328		M.V.M (CH10)
TAPE	M. EQ.	SPEC.	
	M.V.M/ OSCILLO- SCOPE/ PATTERN GENERATOR	WAVEFORM IS MAXIMIZED MORE THAN 5 Vp-p	

1. Supply a video signal (PHILIPS pattern) from the pattern generator to the input of the M.V.M.
2. Connect the output of the M.V.M to RF input of the Deck.
3. Press the SEARCH / FINE BUTTON so that the modulated RF signal on the channel E10 is able to receive.
4. Set the AFC ON condition.
5. Connect the oscilloscope to TP7303.
6. Set the mode switch of the M.V.M. to STEREO mode.
7. Adjust VR7326 mutually so that the waveform (117.5Hz) is maximized and then confirm that the STEREO LED on the Deck just lights up. Change the output level of the M.V.M to 45dBu. And then adjust T7301 mutually so that the waveform (117.5Hz) is maximized and then confirm that the STEREO LED on the Deck just lights up.
8. Re-set the mode switch of the M.V.M to Multiplex mode.
9. Re-connect the oscilloscope to TP7304.
10. Adjust VR7328 so that the waveform (274.1Hz) is maximized and then confirm that the Multiplex LED on the Deck just lights up.

Note:

Confirm that the level of the waveforms (117.5Hz and 274.1Hz) are more than 5Vp-p.

2-4-40. STEREO SEPARATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
DECODER C.B.A-(11)	VR7301		M.V.M (CH10)
TAPE	M. EQ.	SPEC.	
	M.V.M/ PATTERN GENERATOR/ NOISE METER	LEVEL IS REMAINDER MORE THAN 30dB	

1. Supply a video signal (PHILIPS pattern) from the pattern generator to the input of the Deck.
2. Connect the output of the M.V.M to RF input of the Deck.
3. Press the SEARCH / FINE BUTTON so that the modulated RF signal on the channel E10 is able to receive.
4. Set the AFC ON condition.
5. Connect the noise meter to Decoder C.B.A-(11).
6. Set the mode switch of the M.V.M to LEFT mode.
7. Read the value "A" of the noise meter, when the mode switch of the M.V.M to LEFT mode.
8. Re-set the mode switch of the M.V.M to RIGHT mode.
9. Adjust VR7301 so that the reading of the noise meter becomes minimum and read the value "B" of the noise meter, when the mode switch of the M.V.M to RIGHT mode.
10. Find the remainder of "A" and "B". Confirm the find one is more than 30dB.

2-4-41. AUDIO OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
DECODER C.B.A. (11):(L) (12):(R)	VR7344 (L) VR7340 (R)		M.V.M (CHE10)
TAPE	M. EQ.	SPEC.	
	M.V.M/ NOISE METER/ PATTERN GENERATOR	100 ± 5mVrms	

1. Supply a video signal (PHILIPS pattern) from the pattern generator to the input of the Deck.
2. Connect the output of the M.V.M to RF input of the Deck.
3. Press the SEARCH / FINE BUTTON so that the modulated RF signal on the channel E10 is able to receive.
4. Set the AFC ON condition.
5. Set the mode switch of the M.V.M to LEFT mode.
6. Connect the noise meter to Decoder C.B.A-(11).
7. Adjust VR7344 for 100 ± 5mVrms.
8. Re-set the mode switch of the M.V.M to RIGHT mode.
9. Re-connect the noise meter to Decoder C.B.A-(12).
10. Adjust VR7340 for 100 ± 5mVrms.

2-4-42. MAIN AUDIO OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
DECODER C.B.A-(9)	VR751		M.V.M (CHE10)
TAPE	M. EQ.	SPEC.	
	M.V.M/ NOISE METER/ PATTERN GENERATOR	85 ± 5mVrms	

1. Supply a video signal (PHILIPS pattern) from the pattern generator to the input of the M.V.M.
2. Connect the output of the M.V.V to RF input of the Deck.
3. Press the SEARCH / FINE BUTTON so that the modulated RF signal on the channel E10 is received.
4. Set the AFC ON condition.
5. Set the mode switch of the M.V.M to NORMAL mode.
6. Connect the noise meter to the Decoder C.B.A-(9).
7. Adjust VR751 for 85 ± 5mVrms.

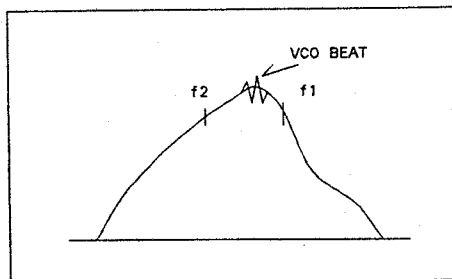


FIG.E28

11. Readjust the VR of the Adjustment Jig. so that the sweep wave becomes 0.3Vp-p on the monitor scope. Adjust the T703 so that the waveform becomes as follows.
12. Preadjust the X717 & Tuner Converter Coil so that the sweep output waveform becomes maximum and then adjust the X717 & Tuner Converter Coil so that the waveform becomes as follows.

MODEL NO.	NV-D80EV	NV-D80EG	NV-D80B
MARKER FREQUENCY	f _s	40.4MHz	41.5MHz
	f _p	38.9MHz	39.5MHz
	f ₁	38.15MHz	38.6MHz
	f ₂	35.22MHz	35.5MHz
	f _c	34.47MHz	35.07MHz
	f ₃	33.97MHz	34.57MHz
	f _s	33.4MHz	33.5MHz
	f _p	31.9MHz	31.5MHz
SPECIFICATIONS	f _p	30 ± 5%	30 ± 5%
	f _c	30 ± 15%	35 ± 5%

FIG.E29

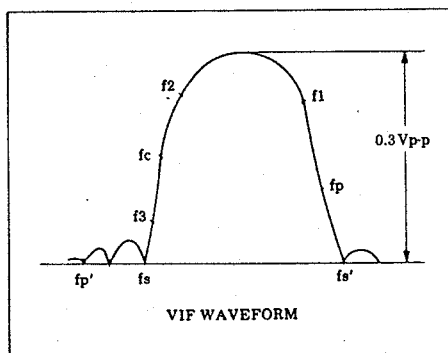


FIG.E30

2-4-33. VCO ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP703 (EG/EO/EV) TP704 (B)	T703		
TAPE	M. EQ.	SPEC.	
	FREQUENCY COUNTER/ TUNING AMPLIFIER	38.9MHz ± 10kHz (EG/EG) 39.5MHz ± 10kHz (B)	

1. Connect a Resistor (1Kohm) between TP709 and GND.
2. Connect the frequency counter to TP704 through the tuning amplifier.
3. Adjust T703 so that the reading of frequency counter is 38.9MHz ± 10kHz (EG/EG), 139.5MHz ± 10kHz (B).

2-4-34. AFC ADJUSTMENT

TP	ADJ.	MODE	INPUT
AFC TERMINAL OF THE TUNER	T704		CW SIGNAL (1Vrms)
TAPE	M. EQ.	SPEC.	
	CW OSCILLATOR/ D.V.M.	A = 38.9MHz (EV/EG) A = 39.5MHz (B)	

1. Set the SEARCH/FINE button so that the modulated RF signal on the channel (E10:EG/EG,E60:B) is able to receive. And set the DC power supply for 15 ± 1V and supply it to BT Terminal of the Tuner after cutting off the BT voltage from the CH Select Pack C.B.A.
2. Set the CW oscillator output for "A" MHz and 1Vrms. Connect the CW oscillator output to the Tuner Test Point.
3. Connect the D.V.M. to the AFC terminal of the tuner.
4. Read the value "B" of the D.V.M., when the AFC is OFF condition.
5. Set the AFC ON condition and adjust T704 for "B" ± 0.3V.
6. Change the frequency of the CW oscillator to "A" (MHz) ± 100kHz, and confirm the difference (EV/B), ± 1.5V (EG) respective.

2-4-35. SIF SWEEP ADJUSTMENT (NV-D80B ONLY)

TP	ADJ.	MODE	INPUT
AUDIO OUT (TV DEMODULATOR C.B.A.-(15))	T711 VR751		SIF SWEEP
TAPE	M. EQ.	SPEC.	
	VIF SWEEP/ MONITOR SCOPE	A = 6.0MHz	

1. Set the SEARCH/FINE button so that the modulated RF signal on the channel E60 is able to receive.
2. Set the DC power supply for 15 ± 1V and supply it to BT Terminal of the Tuner after cutting off the BT voltage from the CH Select Pack C.B.A.
3. Connect the SIF sweep generator to TP706 and connect the monitor scope to TV Demodulator C.B.A.-(15) as shown in Fig. E31.

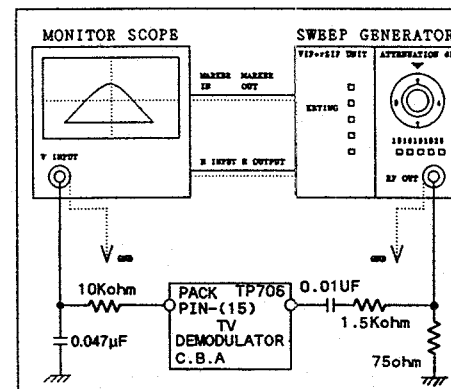


FIG.E31

4. Connect the Jig. to both points TP709 and TV Demodulator C.B.A.-(6). Adjust the VR of the Jig. so that the DC level becomes less than 3V.

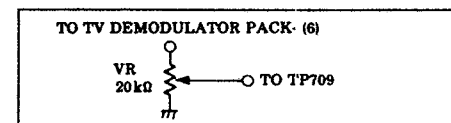


FIG.E32

5. Set the output of SIF sweep generator for 250mVrms at no load.
6. Adjust VR751 so that the SIF waveform becomes center.
7. Adjust T711 so that the attenuation of (A) trap becomes minimum. And adjust for maximum peak-to-peak amplitude of response "S" curve as shown in Fig. E33.

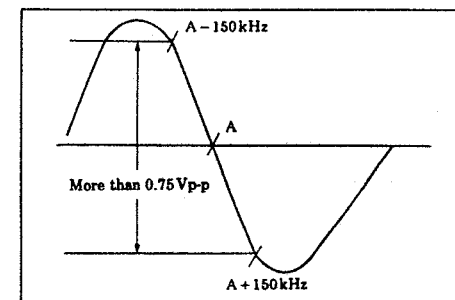


FIG.E33

8. Confirm that the level between (A) ± 150kHz marker position is more than 0.75Vp-p.

2-4-36. AUDIO LEVEL ADJUSTMENT (NV-D80B ONLY)

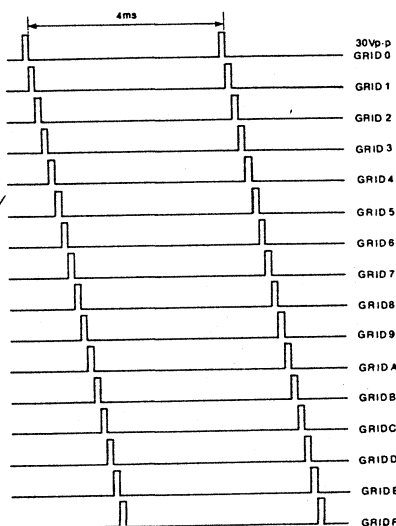
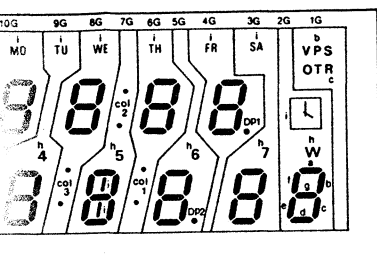
TP	ADJ.	MODE	INPUT
AUDIO OUT (TV DEMODULATOR C.B.A.-(15))	VR751		VIDEO COLOUR BAR V. MODU: 87.5%, 75dBµ AUDIO 400Hz A. MODU: 30% (60%, 100%) (15kHz DEV)
TAPE	M. EQ.	SPEC.	
	RC OSC/ OSCILLOSCOPE or D.V.M/ M.V.M/ PATTERN GENERATOR		

1. Supply a video signal (Colour Bar pattern) from the pattern generator and 400Hz sine wave from RC oscillator to the input of the M.V.M.
2. Connect the output of the M.V.M. to RF Input of the Deck.
3. Press the SEARCH (+) or (-) button so that the modulated RF signal on the channel E60 is able to receive.
4. Set the AFC ON condition.
5. Connect the oscilloscope OR D.V.M to TV Demodulator C.B.A.-(15).
6. Adjust VR751 so that the audio level becomes as shown below.

DEV	30%	60%	100%
M. EQ.			
OSCILLOSCOPE	100 ± 5mVp-p	200 ± 5mVp-p	333 ± 17mVp-p
D.V.M	32 ± 2mVrms	70 ± 4mVrms	117 ± 6mVrms

3-1. SYSTEM CONTROL BLOCK DIAGRAM





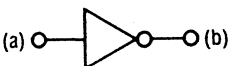
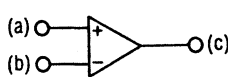
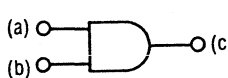
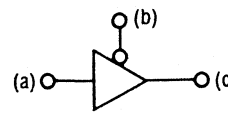
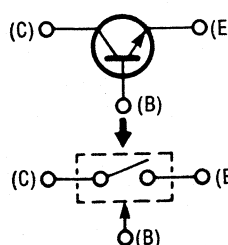
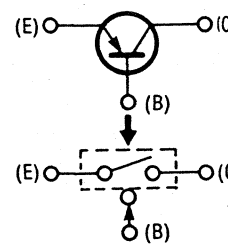
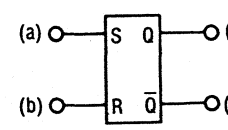
B. A. (VEP06380B)

C1490HA)

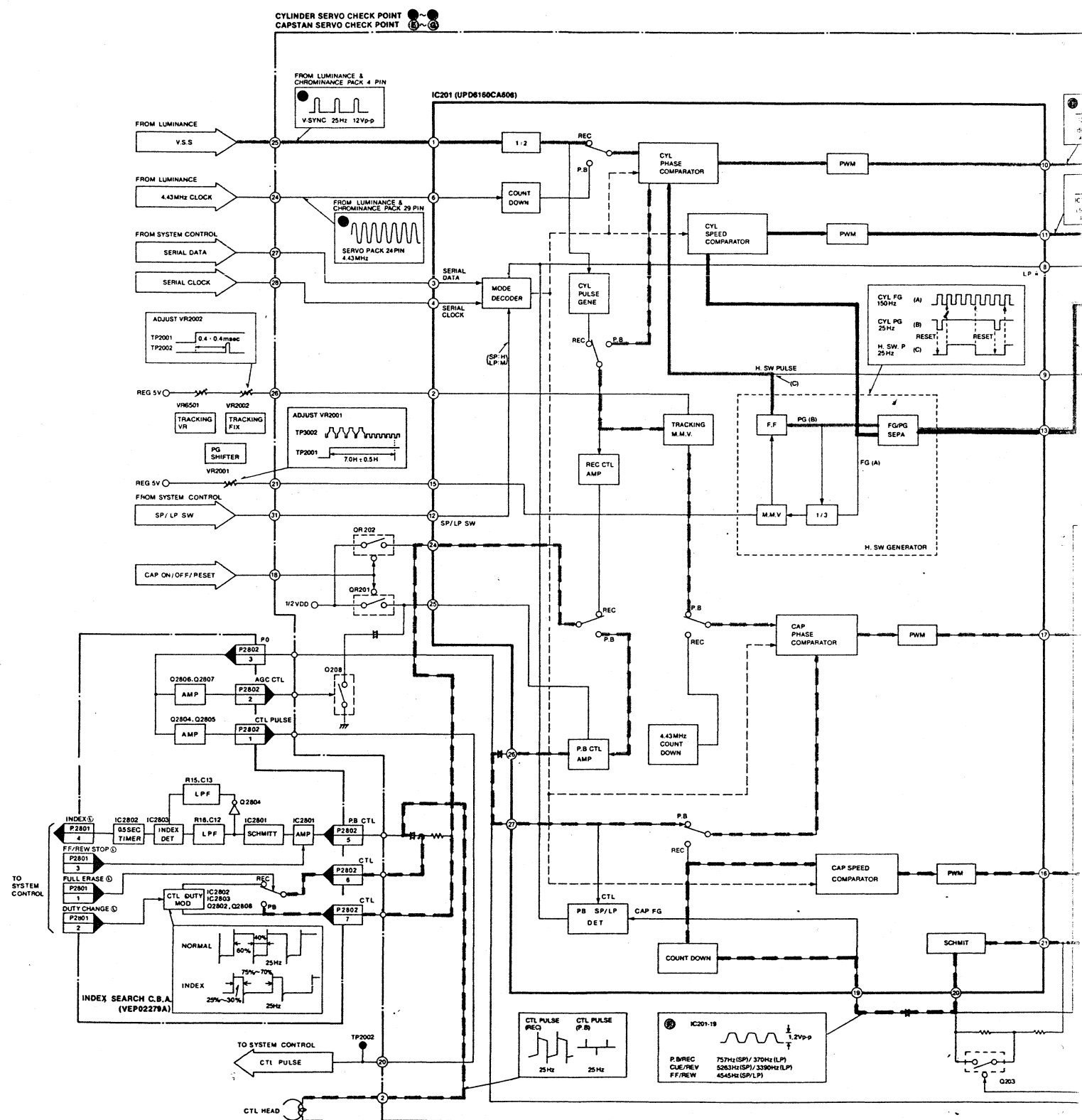
5701

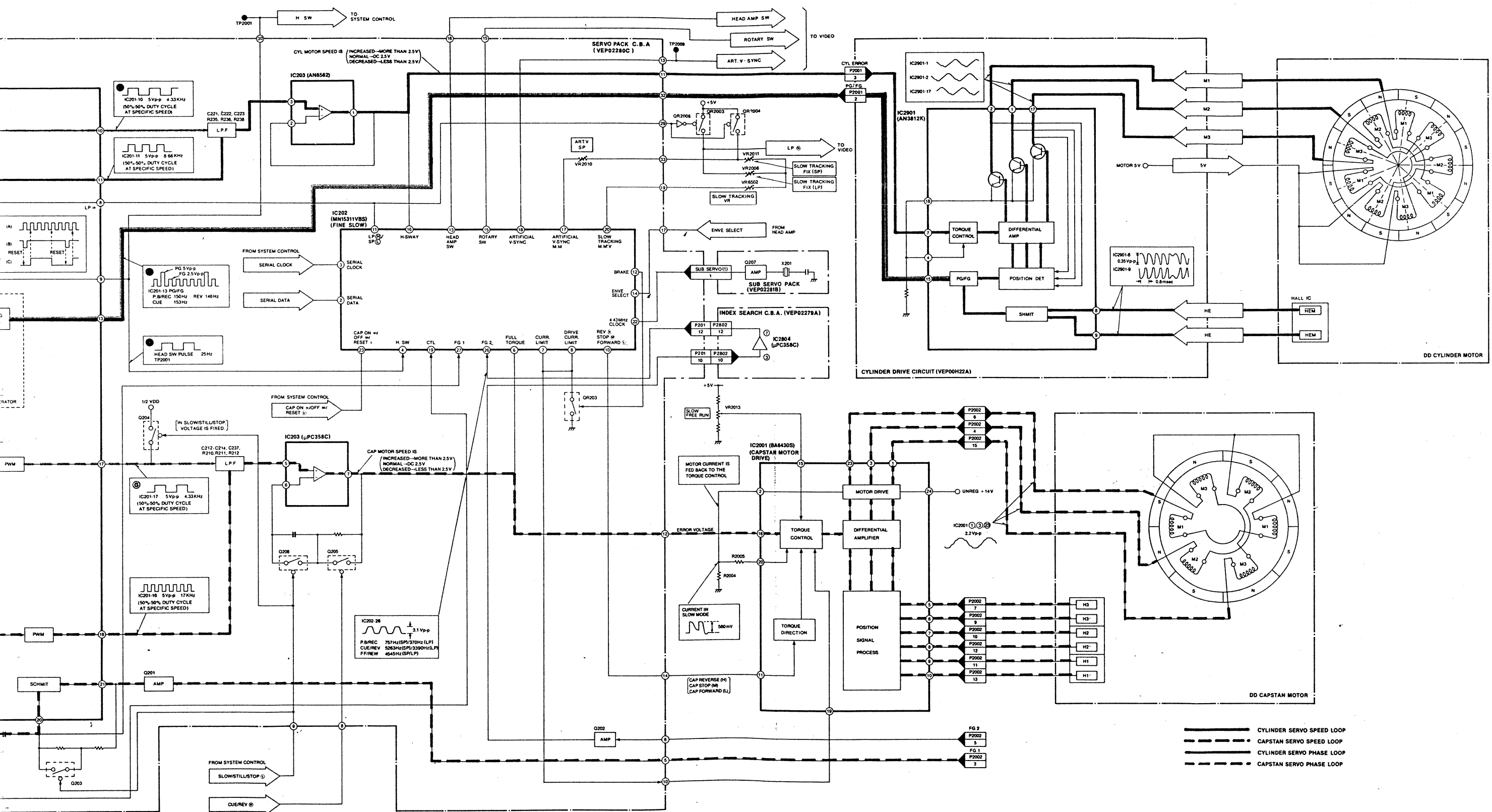
IV-D80EG/EV)

SYSTEM CONTROL Section

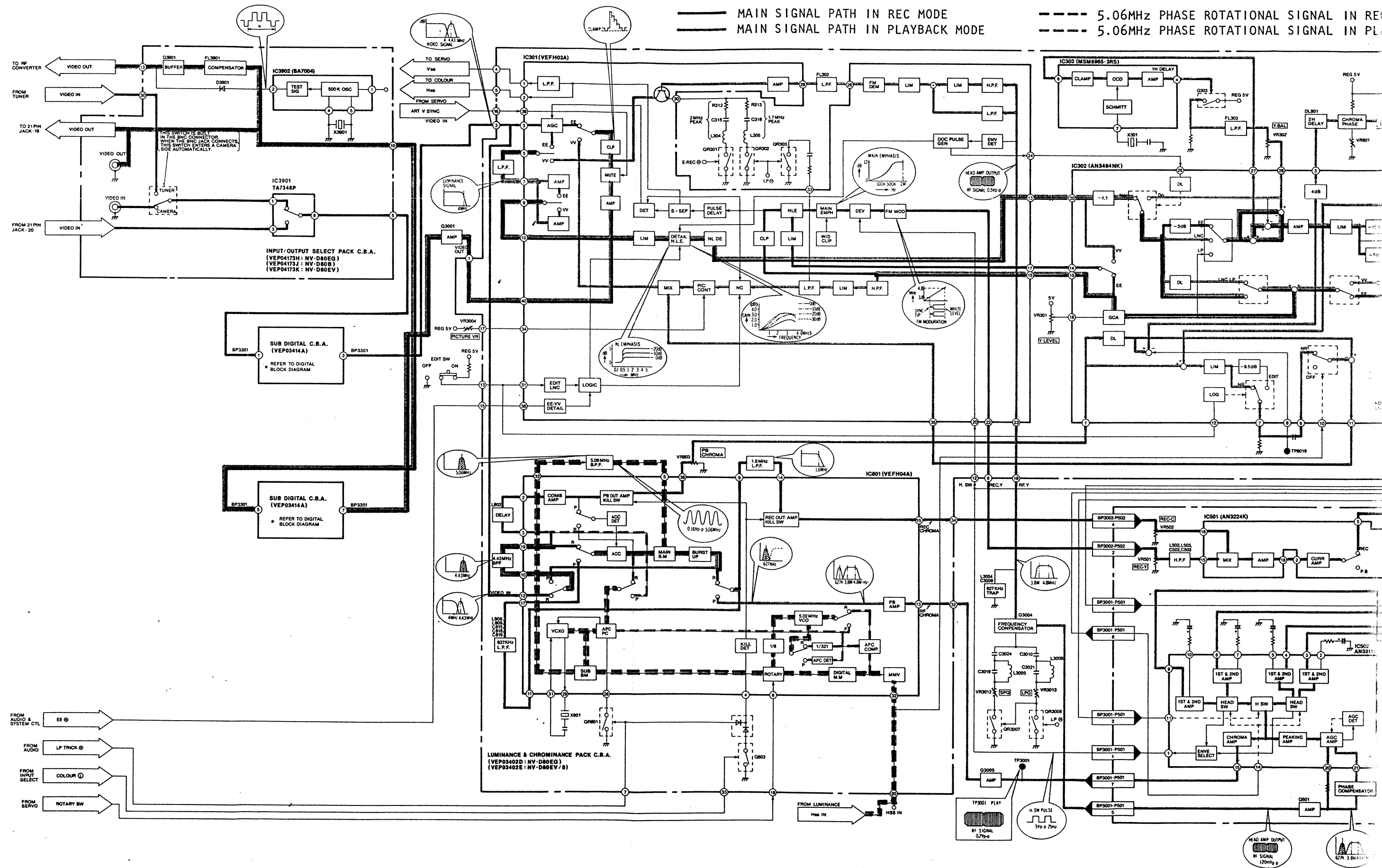
SYMBOL	TRUTH VALUE TABLE																				
INVERTER 	<table><tr><td>IN</td><td>(a)</td><td>H</td><td>L</td></tr><tr><td>OUT</td><td>(b)</td><td>L</td><td>H</td></tr></table>	IN	(a)	H	L	OUT	(b)	L	H												
IN	(a)	H	L																		
OUT	(b)	L	H																		
COMPARTOR 	<table><tr><td>IN</td><td>(a)</td><td rowspan="2">(a) > (b)</td><td rowspan="2">(a) < (b)</td></tr><tr><td></td><td>(b)</td></tr><tr><td>OUT</td><td>(c)</td><td>H</td><td>L</td></tr></table>	IN	(a)	(a) > (b)	(a) < (b)		(b)	OUT	(c)	H	L										
IN	(a)	(a) > (b)	(a) < (b)																		
	(b)																				
OUT	(c)	H	L																		
AND CIRCUIT 	<table><tr><td>IN</td><td>(a)</td><td>L</td><td>L</td><td>H</td><td>H</td></tr><tr><td></td><td>(b)</td><td>L</td><td>H</td><td>L</td><td>H</td></tr><tr><td>OUT</td><td>(c)</td><td>L</td><td>L</td><td>L</td><td>H</td></tr></table>	IN	(a)	L	L	H	H		(b)	L	H	L	H	OUT	(c)	L	L	L	H		
IN	(a)	L	L	H	H																
	(b)	L	H	L	H																
OUT	(c)	L	L	L	H																
OR CIRCUIT 	<table><tr><td>IN</td><td>(a)</td><td>L</td><td>L</td><td>H</td><td>H</td></tr><tr><td></td><td>(b)</td><td>L</td><td>H</td><td>L</td><td>H</td></tr><tr><td>OUT</td><td>(c)</td><td>L</td><td>H</td><td>H</td><td>H</td></tr></table>	IN	(a)	L	L	H	H		(b)	L	H	L	H	OUT	(c)	L	H	H	H		
IN	(a)	L	L	H	H																
	(b)	L	H	L	H																
OUT	(c)	L	H	H	H																
THREE STATES BUFFER 	<table><tr><td>IN</td><td>(a)</td><td>H</td><td>L</td><td>H or L</td></tr><tr><td></td><td>(b)</td><td>L</td><td>L</td><td>H</td></tr><tr><td>OUT</td><td>(c)</td><td>H</td><td>L</td><td>※</td></tr></table> ※ High Impedance	IN	(a)	H	L	H or L		(b)	L	L	H	OUT	(c)	H	L	※					
IN	(a)	H	L	H or L																	
	(b)	L	L	H																	
OUT	(c)	H	L	※																	
TR. SW (NPN TYPE) 	<table><tr><td>BASE</td><td>H</td><td>L</td></tr><tr><td>TR. SW</td><td>ON</td><td>OFF</td></tr></table>	BASE	H	L	TR. SW	ON	OFF														
BASE	H	L																			
TR. SW	ON	OFF																			
TR. SW (PNP TYPE) 	<table><tr><td>BASE</td><td>H</td><td>L</td></tr><tr><td>TR. SW</td><td>OFF</td><td>ON</td></tr></table>	BASE	H	L	TR. SW	OFF	ON														
BASE	H	L																			
TR. SW	OFF	ON																			
R-S TYPE FLIP-FLOP 	<table><tr><td>IN</td><td>(a)</td><td>L</td><td>L</td><td>⌐</td></tr><tr><td></td><td>(b)</td><td>L</td><td>⌐</td><td>L</td></tr><tr><td>OUT</td><td>(c)</td><td>※</td><td>L</td><td>H</td></tr><tr><td></td><td>(d)</td><td>◆</td><td>H</td><td>L</td></tr></table> ※ Initial condition is maintained. ◆ Initial condition is reversed.	IN	(a)	L	L	⌐		(b)	L	⌐	L	OUT	(c)	※	L	H		(d)	◆	H	L
IN	(a)	L	L	⌐																	
	(b)	L	⌐	L																	
OUT	(c)	※	L	H																	
	(d)	◆	H	L																	

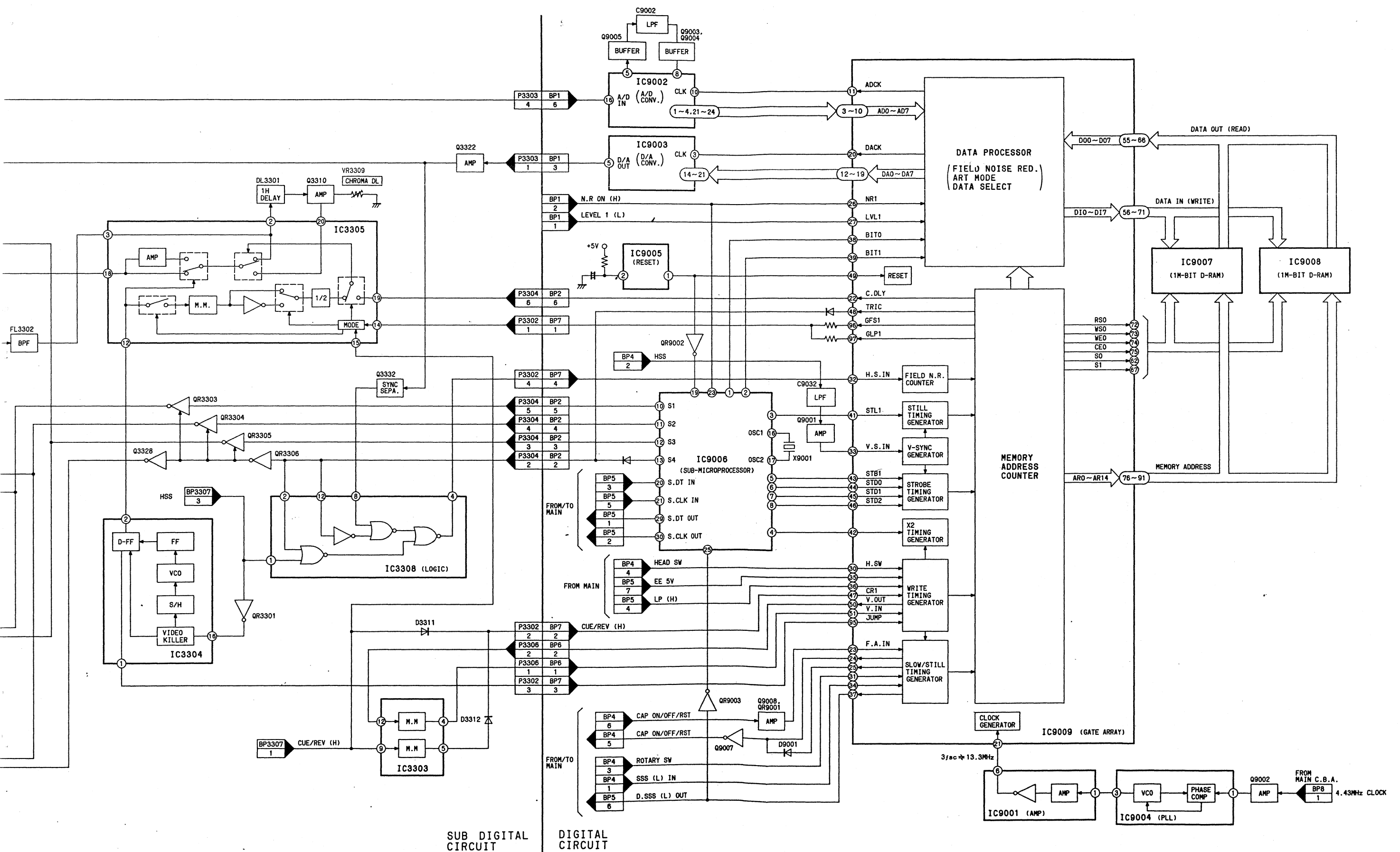
3-2. SERVO BLOCK DIAGRAM



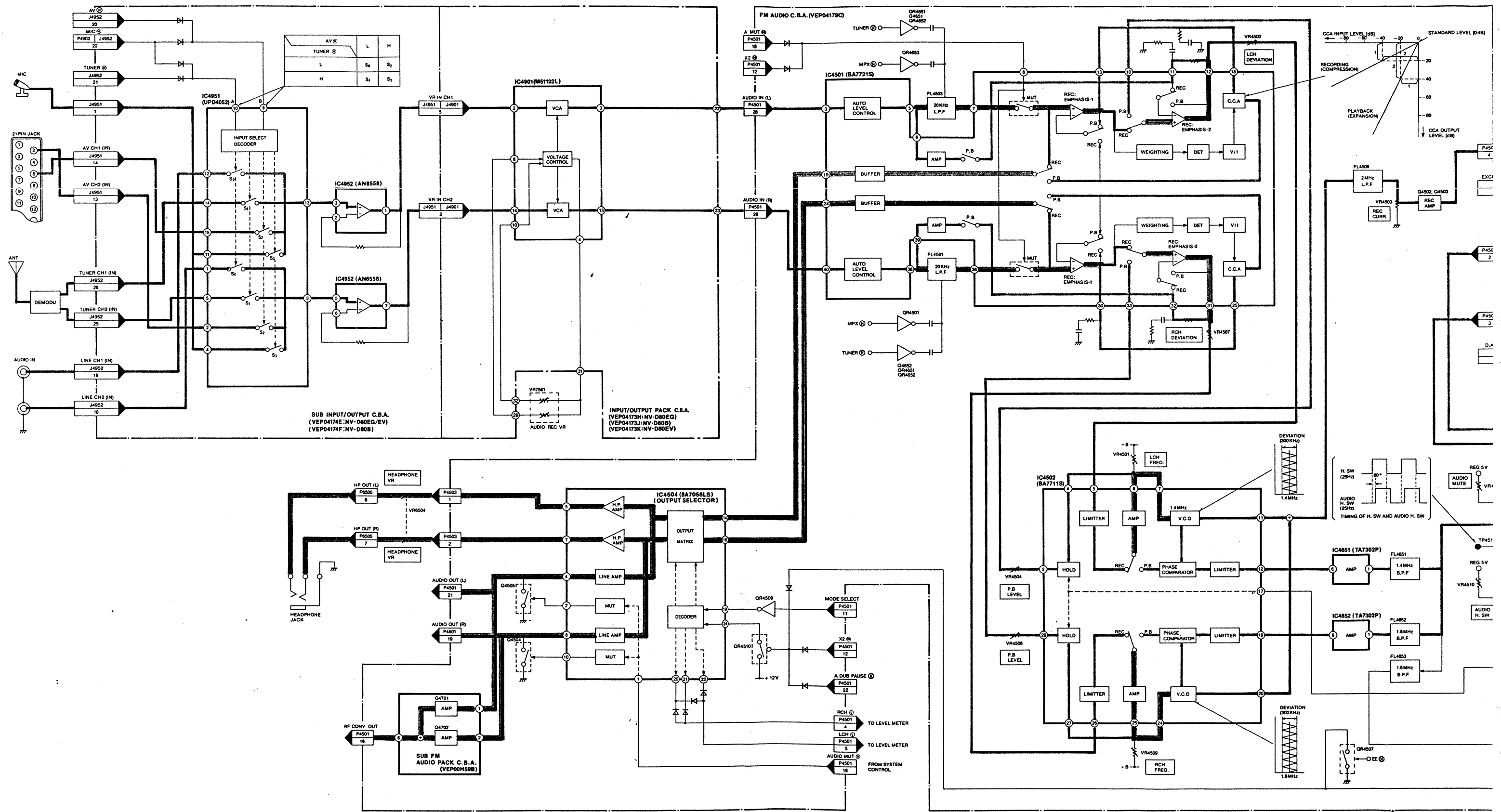


3-3. LUMINANCE & CHROMINANCE BLOCK DIAGRAM

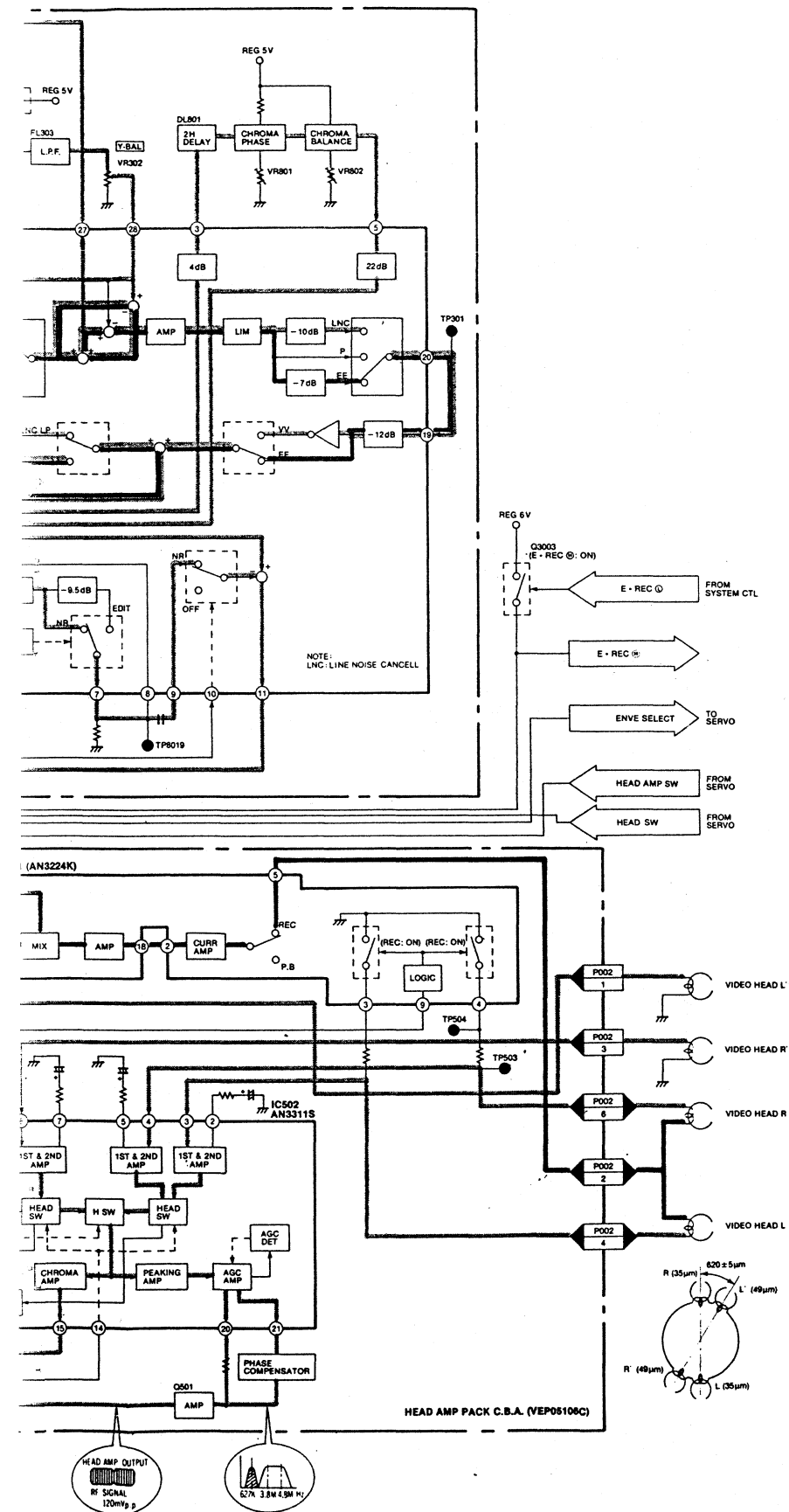




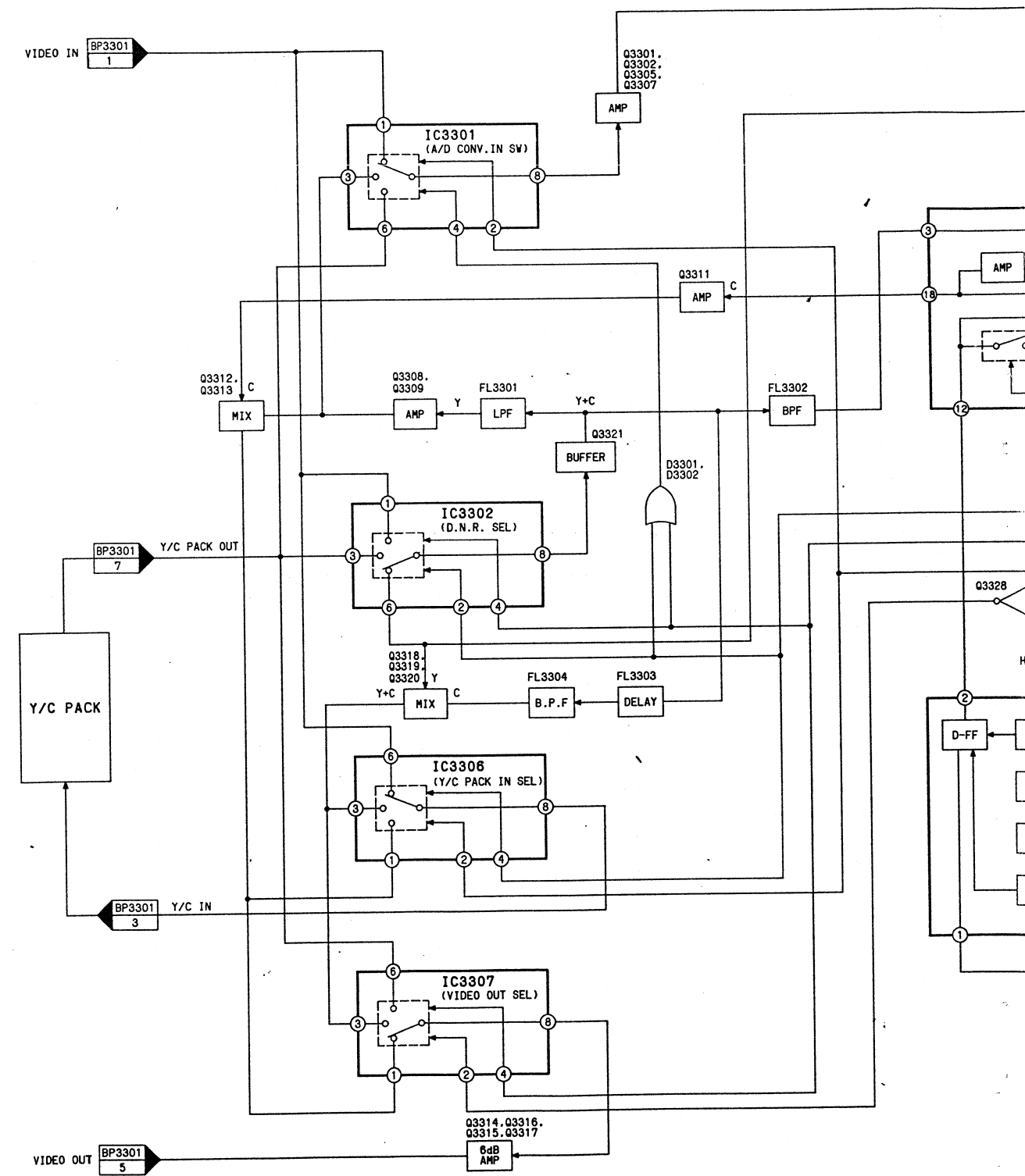
3-5. FM AUDIO BLOCK DIAGRAM



ATIONAL SIGNAL IN REC MODE
ATIONAL SIGNAL IN PLAYBACK MODE



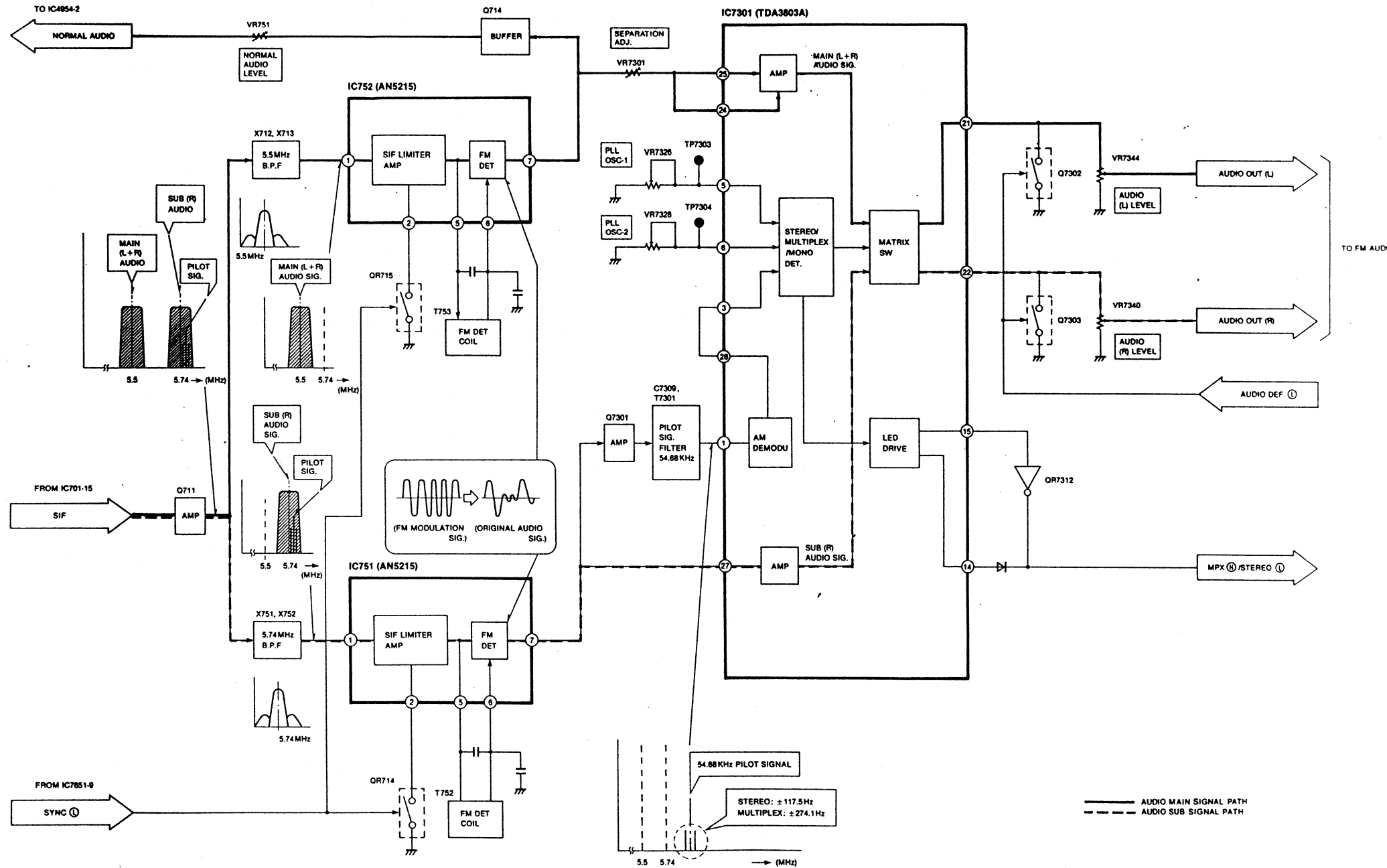
3-4. DIGITAL BLOCK DIAGRAM



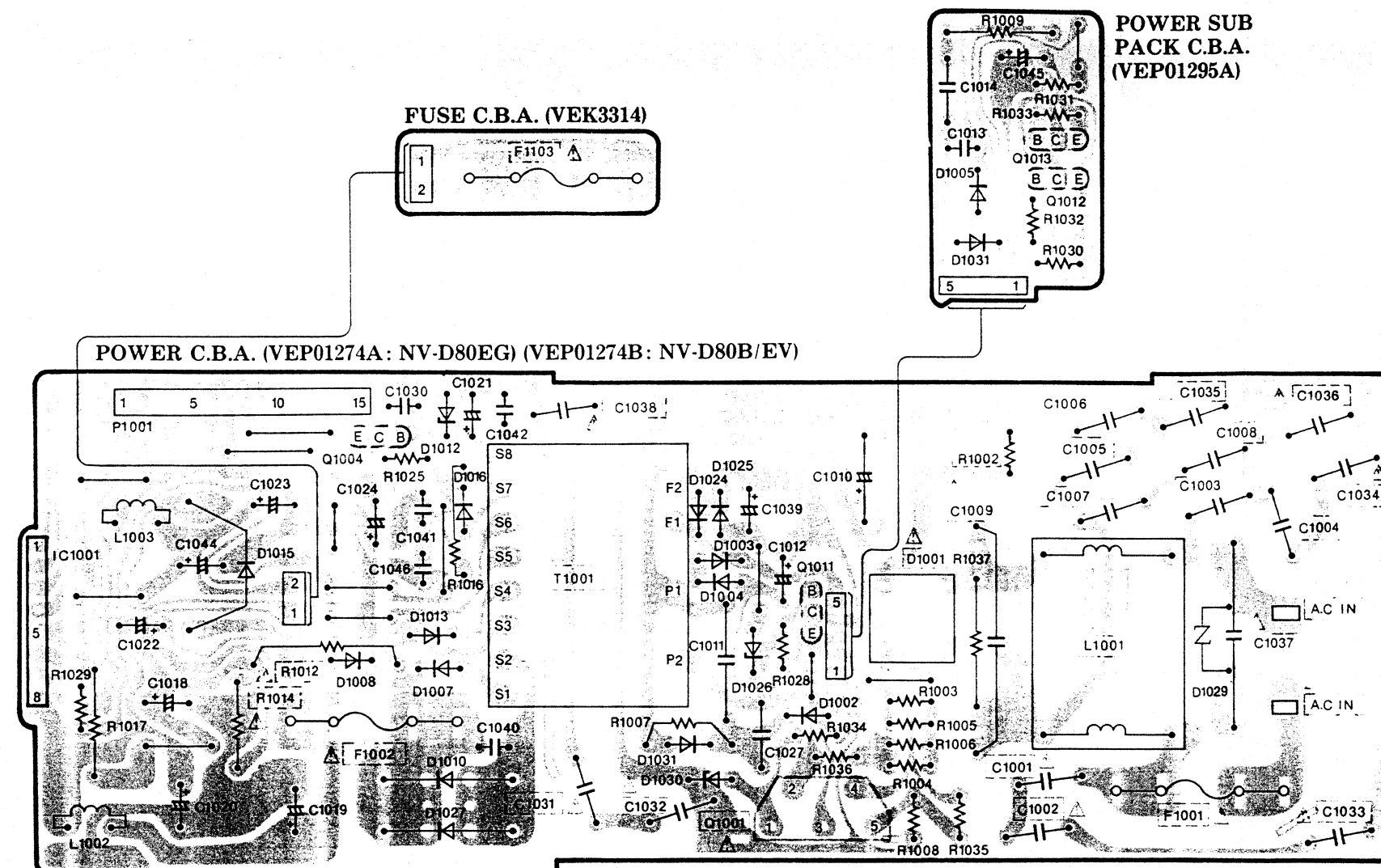
Next Page:
DECODER Section



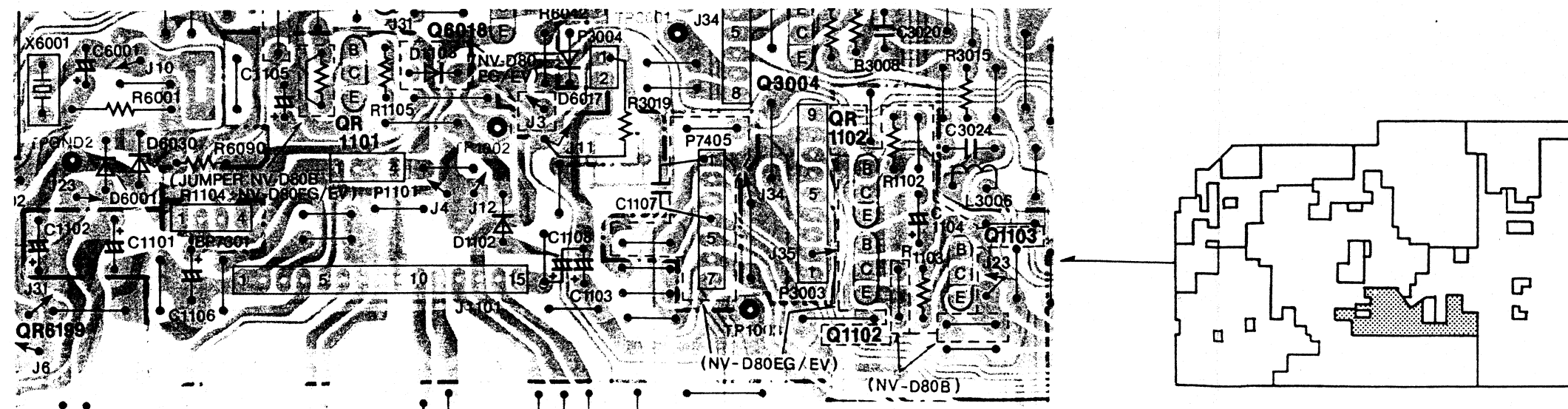
3-6. DECODER BLOCK DIAGRAM



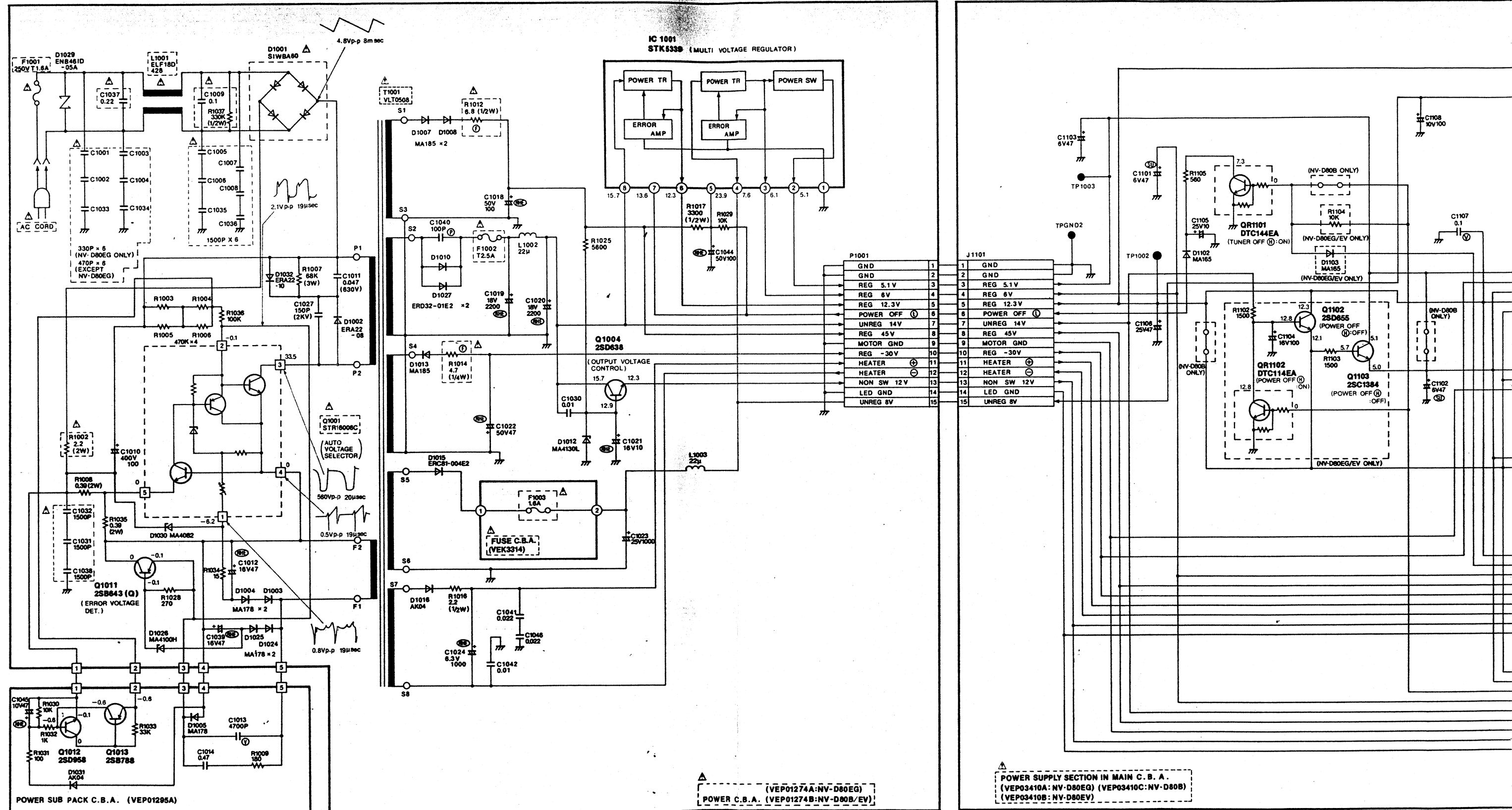
3-8. POWER C.B.A. (VEP01274A: NV-D80EG) (VEP01274B: NV-D80B/EV)



3-9. POWER SUPPLY Section In Main C.B.A. (VEP03410A: NV-D80EG) (VEP03410C: NV-D80B) (VEP03410B: NV-D80EV)



3-7. POWER SCHEMATIC DIAGRAM

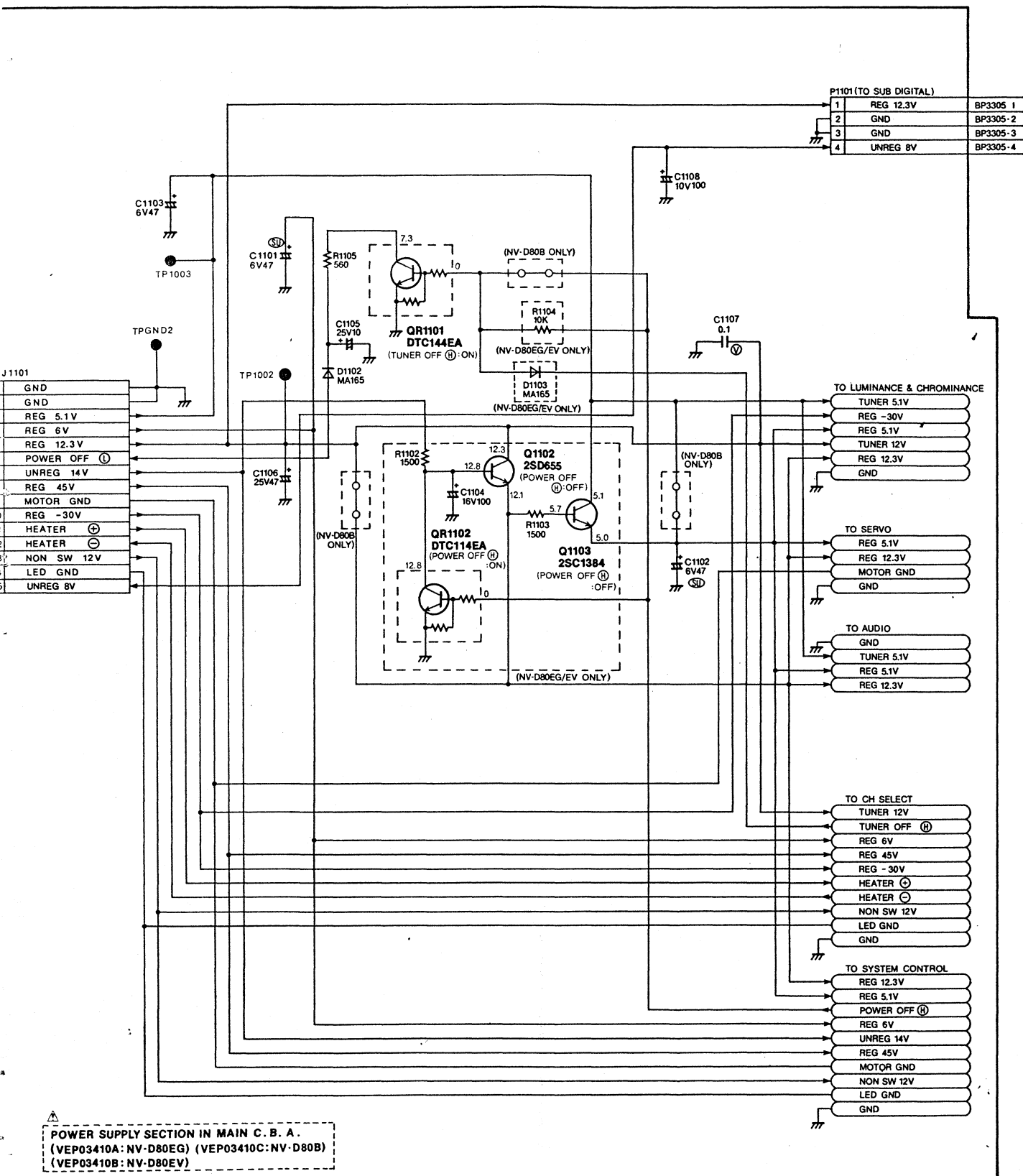


NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK Δ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.
THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE
SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSISTOR CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS:
PRIMARY SIDE Q1001-(5)
SECONDARY SIDE TP GND OF MAIN C.B.A.
NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE
INPUT AC IS 220V.



NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE Q1001-(5)
SECONDARY SIDE ... TP GND OF MAIN C.B.A.
NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 220V.

SYSTEM CONTROL SCHEMATIC	
Transistor	
Q1401	A-3
Q1501	G-1
Q1502	G-2
Q6006	F-14
Q6007	D-14
Q6008	C-14
Q6009	D-14
Q6010	C-14
Q6011	C-14
Q6015	G-8
Q6016	G-6
Q6017	F-7
Q6018	F-7
Q6019	F-7
Transistor & Resistor	
QR6001	E-8
QR6004	F-8
QR6005	F-14
QR6006	E-14
QR6008	F-7
QR6010	A-14
QR6011	G-7
QR6012	F-8
QR6013	G-9
Integrated Circuit	
IC1501	E-3
IC6001	F-11
IC6002	C-7
IC6003	C-8
IC6004	F-9
Test Point	
TP6011	F-8
Connector	
P1502	B-3
P1504	D-3
P1505	D-2
P1506	E-2
P1507	G-1
P1508	G-2
P6002	E-4
P6003	G-17
P6005	B-4
P6006	B-17
P6007	G-4
P6008	F-17
P6009	F-4
BP6001	C-4
BP6004	F-17

ADDRESS INFORMATION

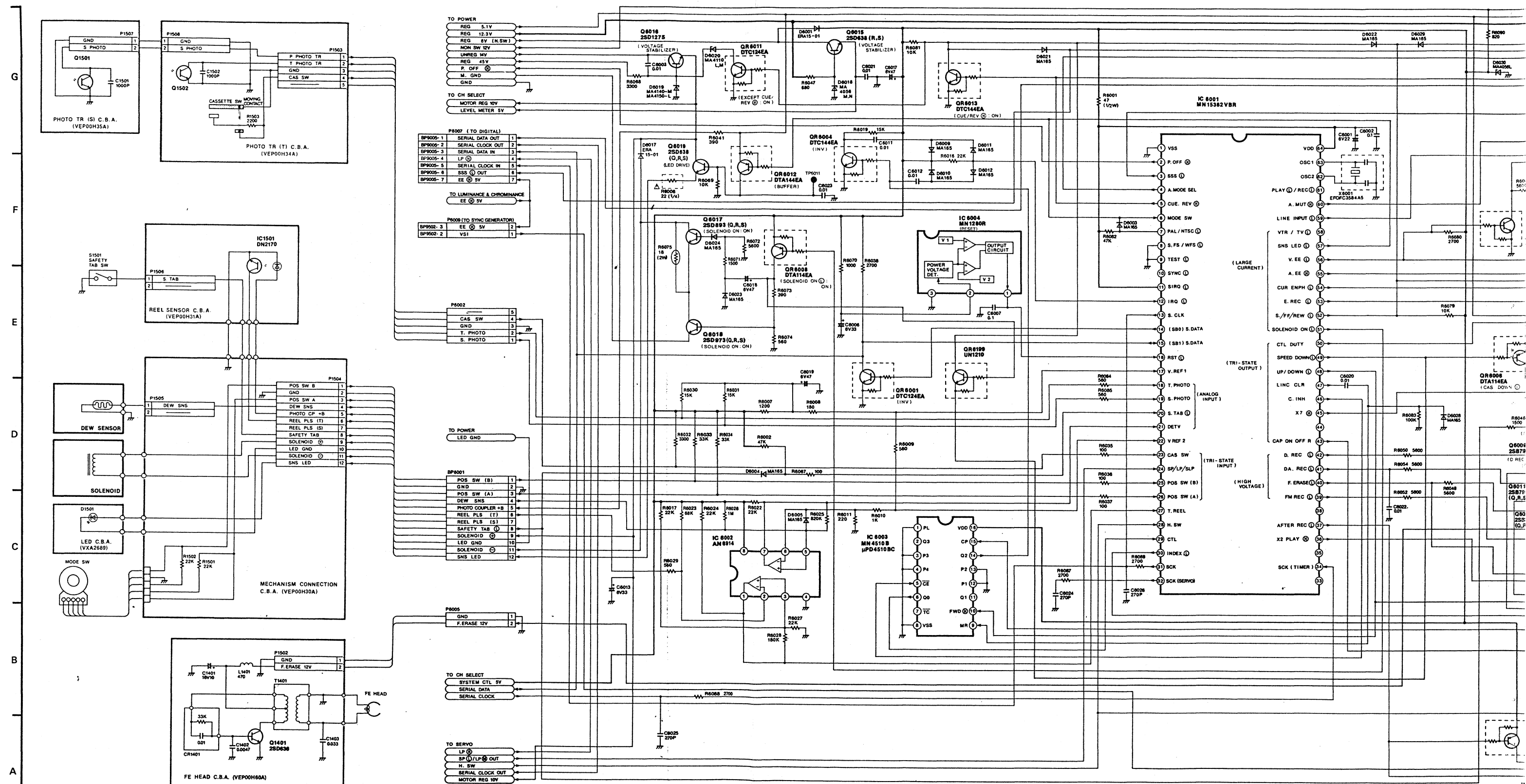
SYSTEM CONTROL ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	0	0	0	4.2	4.4	0	5.0	4.0	5.0	5.1	4.8	0.3	4.9	5.1	2.9	3.2	3.2	0.5
PLAY	0	0	5.1	0	0	4.3	4.4	0	5.1	4.0	5.1	5.1	4.8	0.3	4.9	5.2	2.9	3.2	3.2	0.5
REC	0	0	5.1	0	0	4.3	4.4	0	5.1	3.9	5.1	5.1	4.8	0.2	4.9	5.2	2.9	3.2	3.2	0.5
F.F	0	0	5.0	0	0	4.2	4.4	0	5.0	4.0	5.0	5.0	4.8	0.3	4.9	5.2	2.9	3.2	3.2	0.5
REW	0	0	5.1	0	0	4.3	4.4	0	5.1	4.0	5.1	5.0	0	0.3	4.9	5.2	2.9	3.2	3.2	0.5
REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	2.0	2.1	0.1	2.1	5.2	0	0	0	5.0	4.8	5.0	4.9	4.8	5.0	0	5.0	5.0	12.1	12.1
PLAY	0	2.0	2.1	0.1	5.2	0	2.6	2.6	2.6	0	4.8	5.0	4.9	4.8	5.1	0	5.1	5.1	12.1	12.1
REC	0	2.0	2.1	0.1	5.2	0	2.6	2.6	2.6	0	4.8	5.0	4.9	4.8	5.1	0.1	5.1	5.1	0.2	0.3
F.F	0	2.0	2.1	0.1	2.1	5.2	2.6	0	2.6	5.0	4.8	5.0	4.9	4.8	0	0	5.0	5.0	12.1	12.1
REW	0	2.0	2.1	0.1	2.1	5.2	2.6	0	2.6	5.0	4.8	5.0	4.9	4.8	0	0	5.1	5.1	12.1	12.8
REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	12.1	12.1	1.9	0	0.1	5.0	5.0	5.0	0.1	5.0	5.2	0.1	0.1	0.1	4.7	0.2	4.2	0	5.0	0
PLAY	12.1	12.1	5.0	0	0	0	5.1	5.0	0.1	5.1	5.2	4.1	0.1	4.7	0.1	4.6	4.2	0.1	5.1	0
REC	0.3	0.3	5.0	0.1	0.1	0.1	5.1	5.0	0.2	5.1	5.2	4.1	3.9	4.7	4.7	0.2	4.4	0	5.0	0
F.F	12.1	12.1	5.0	0	0	0	5.0	5.0	0.1	5.0	5.2	0.1	0.1	0.1	4.7	0.2	4.4	0	5.0	0
REW	12.1	12.1	5.0	0	0.1	0	5.1	0	0.1	5.0	5.2	0.1	0.1	0.1	4.7	0.2	4.4	0	5.0	0
REF. NO.	IC6001																			
MODE	61	62	63	64																
STOP	5.0	1.8	2.4	5.0																
PLAY	5.1	1.8	2.4	5.1																
REC	5.1	1.8	2.4	5.1																
F.F	5.0	1.8	2.4	5.0																
REW	5.1	1.8	2.4	5.0																
REF. NO.	IC6002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0	0	5.0	0	5.2	0	0	5.0	5.2	0	0	5.1	0.6	5.2				
PLAY	0	0	0	0	0	2.6	5.2	0	0	5.0	2.6	0	0	2.6	0.3	5.2				
REC	0	0	0	0	0.1	2.6	5.2	0	0	5.0	5.2	0	0	2.6	2.6	5.2				
F.F	0	0.7	0	0	0	2.6	4.7	0	0	5.0	2.0	0	0	1.5	0.9	5.2				
REW	0	0.9	0	0	0	2.6	4.6	0	0	0	2.0	0	0	2.0	0.7	5.2				
REF. NO.	IC6004																			
MODE	1	2	3																	
STOP	5.2	5.2	0																	
PLAY	5.2	5.2	0																	
REC	5.2	5.2	0																	
F.F	5.2	5.2	0																	
REW	5.2	5.2	0																	

SYSTEM CONTROL TRs DC VOLTAGE CHART (SP MODE)

REF. NO.	Q6006			Q6007			Q6008			Q6009			Q6010			Q6011		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	12.1	0	12.1	12.1	12.1	11.4	12.1	0.3	12.1	12.1	-0.2	12.1	12.1	0	12.1	12.1	0	12.1
PLAY	12.1	12.1	12.1	12.1	12.1	11.4	12.1	0.3	12.1	12.1	0.3	12.1	12.1	0	12.1	12.1	0	12.1
REC	11.6	0	11.6	11.5	11.4	10.7	11.4	11.2	10.6	11.4	11.3	10.7	11.4	11.3	10.7	11.4	11.3	10.7
F.F	12.1	0	12.1	12.1	12.1	11.4	12.1	0.4	12.1	12.1	-0.2	12.1	12.1	0	12.1	12.1	0	12.1
REW	12.1	0	12.1	12.1	12.1	11.4	12.1	0.3	12.1	12.1	-0.2	12.1	12.1	0	12.1	12.1	0	12.1
REF. NO.	Q6015			Q6016			Q6017			Q6018			Q6019			Q1401		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	5.1	5.8	5.7	13.2	14.6	14.4	13.2	13.2	4.6	0	13.2	0	0.7	13.2	0.6	0	0.4	0.3
PLAY	5.1	5.8	5.8	10.2	14.4	11.4	10.2	10.2	1.6	0	10.2	0	0.7	10.2	0.5	0	0.4	0.3
REC	5.1	5.8	5.7	10.2	14.3	11.4	10.2	10.2	1.6	0	10.2	0	0.1	10.2	0	0	11.3	-0.3
F.F	5.1	5.8	5.7	13.1	14.7	14.3	13.1	13.1	4.5	0	13.1	0	0.8	13.1	0.5	0	0.4	0.3
REW	5.1	5.8	5.7	13.1	14.7	14.3	13.1	13.1	4.5	0	13.1	0	0.7	13.1	0.5	0	0.4	0.3
REF. NO.	QR6001			QR6004			QR6005			QR6006			QR6008			QR6010		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	4.9	0.3	0	0	5.1	0	12.1	0.2	5.0	4.8	0.1	5.2	0	5.2	5.2	-0.1	5.0
PLAY	0	4.9	0.2	0	2.6	2.6	0	0	4.6	5.0	4.8	0.1	5.2	0	5.2	5.2	0.1	5.1
REC	0	5.2	0	0	2.6	2.6	0	11.5	0.2	5.6	4.9	0.2	5.2	0	5.2	11.4	11.3	10.7
F.F	0	4.9	0.2	0	2.9	2.1	0	12.1	0.2	5.0	4.8	0.1	5.2	0	5.2	5.2	0	5.0
REW	0	4.9	0.3	0	2.9	2.1	0	12.1	0.2	5.0	4.8	0.1	5.2	0	5.2	5.2	0.1	5.1
REF. NO.	QR6011			QR6012			QR6013			QR6199								
MODE	E	C	B	E	C	B	E	C	B	E	C	B						
STOP	0	3.4	0.6	5.0	0.6	4.5	0	0.6	0	0.1	0.6	0						
PLAY	0	0.1	3.7	5.0	0.6	4.2	0	3.7	0	0.1	3.7	0						
REC	0	0.1	3.7	5.0	0	5.0	0	3.7	0	0.2	3.7	0						
F.F	0	3.4	0.7	5.0	0.7	4.8	0	0.7	0	0.1	0.7	0						
REW	0	3.4	0.7	5.0	0.6	4.7	0	0.7	0	0.1	0.7	0						

3-10. SYSTEM CONTROL SCHEMATIC DIAGRAM



NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

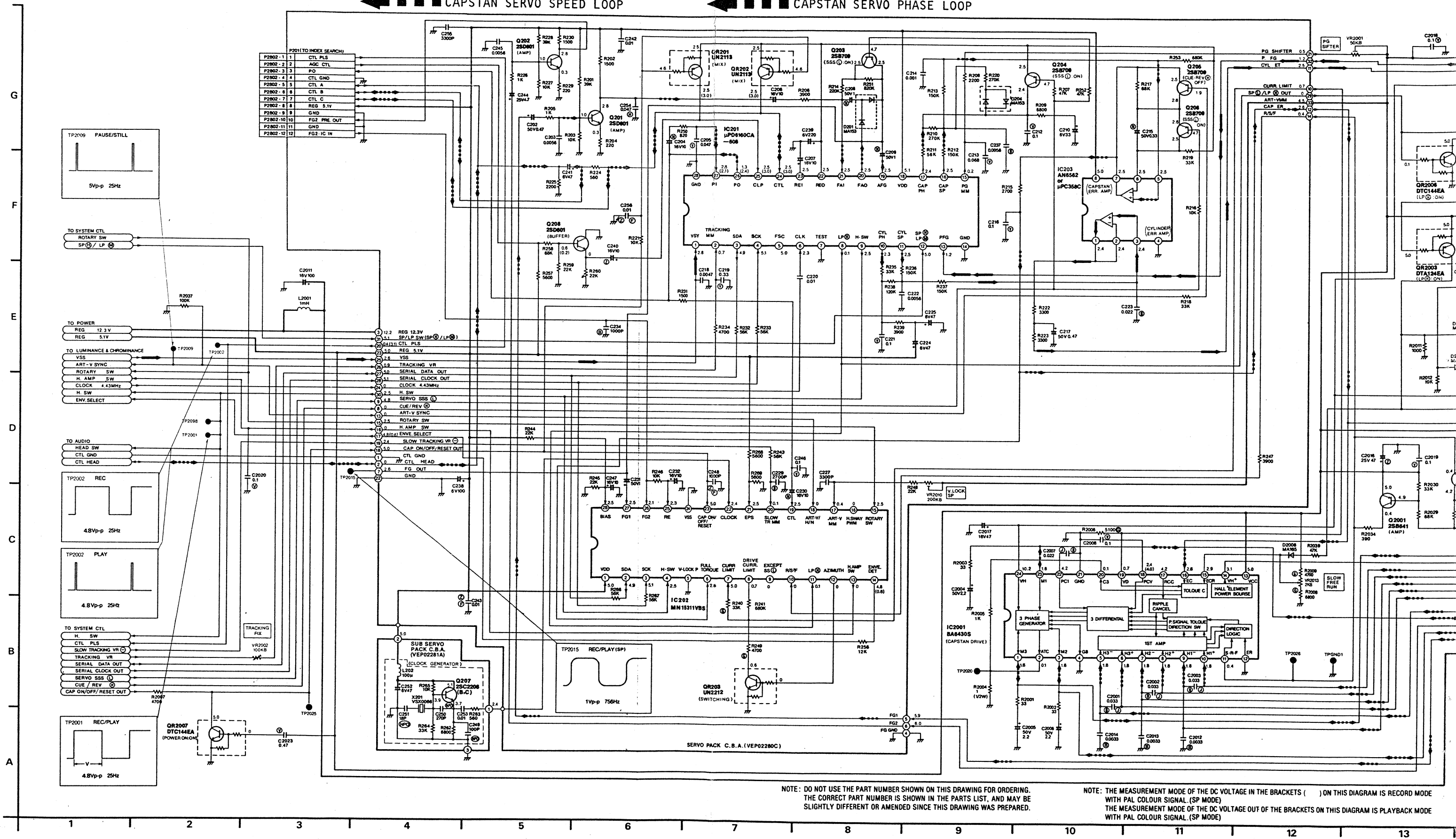
3-12. SERVO SCHEMATIC DIAGRAM

CYLINDER SERVO SPEED LOOP

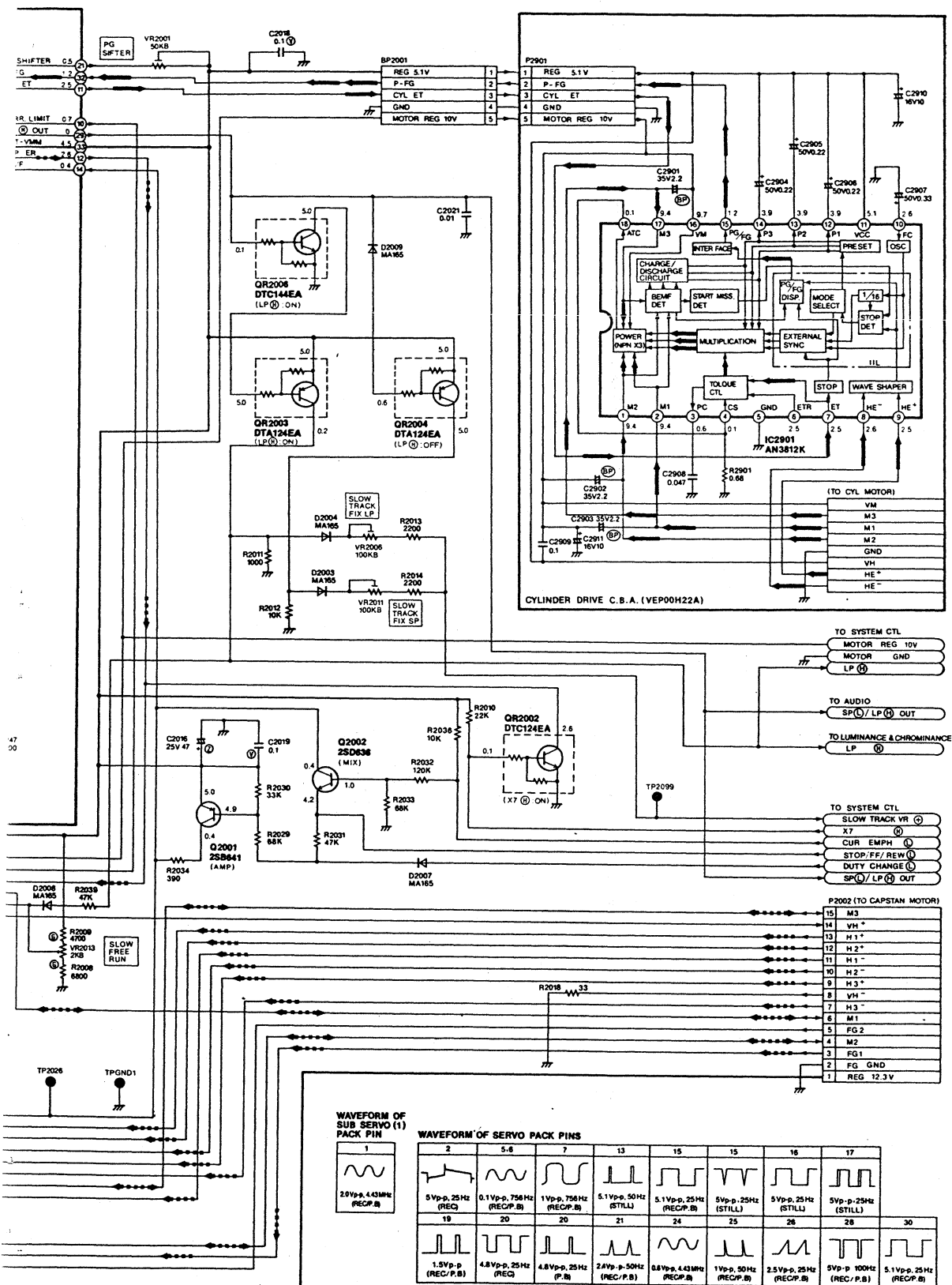
← ■ ■ ■ CAPSTAN SERVO SPEED LOOP

CYLINDER SERVO PHASE LOOP

◀ ■ ■ ■ CAPSTAN SERVO PHASE LOOP



Back Page:
SYSTEM CONTROL Section

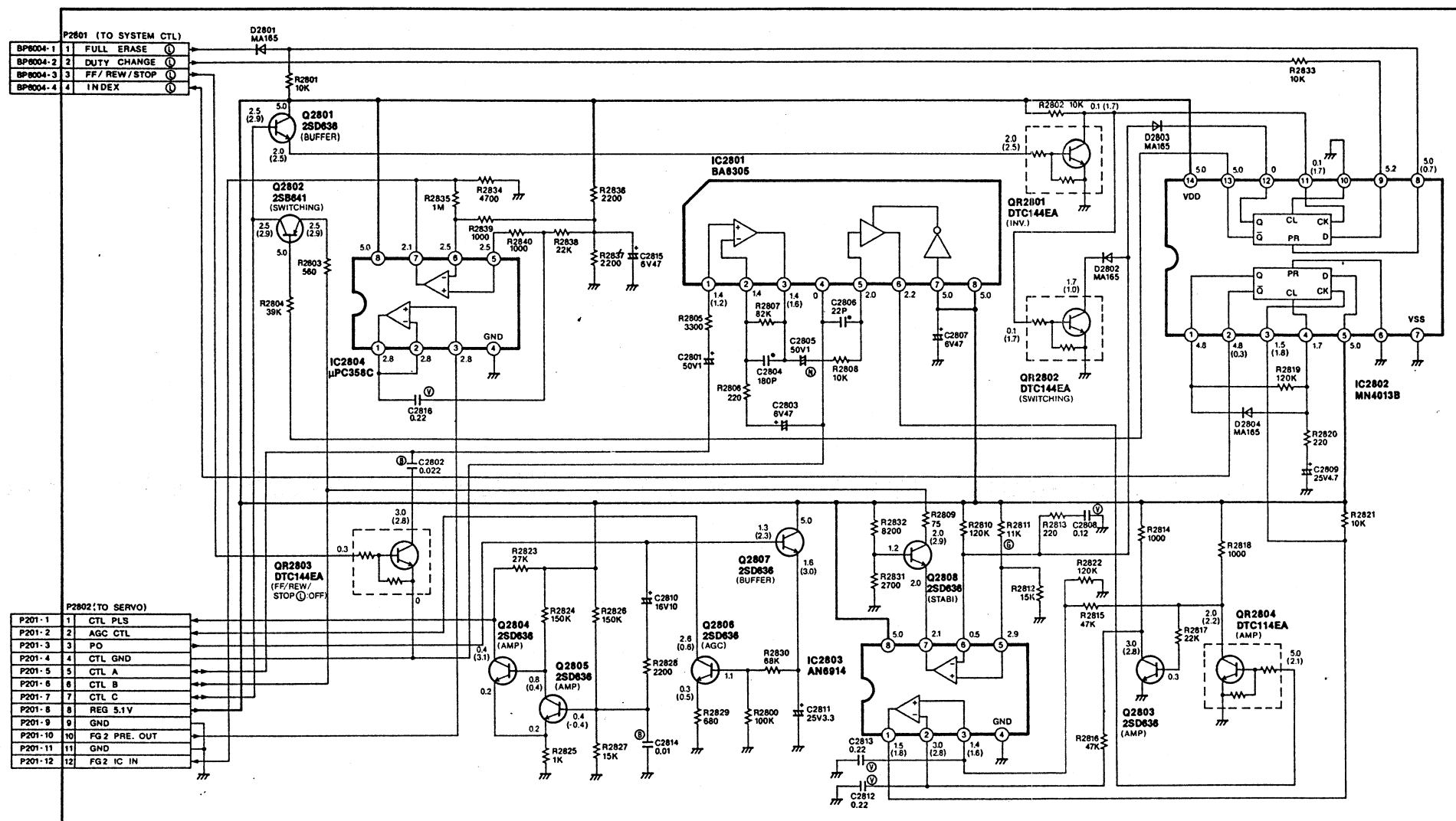


SERVO SCHEMATIC	
Transistor	
Q201	G-6
Q202	G-5
Q203	G-8
Q204	G-10
Q205	G-11
Q206	G-11
Q207	B-5
Q208	F-5
Q2001	C-13
Q2002	D-14
Transistor & Resistor	
QR201	G-7
QR202	B-7
QR203	B-7
QR2002	D-15
QR2003	F-13
QR2004	F-14
QR2006	F-13
QR2007	A-2
Integrated Circuit	
IC201	G-7
IC202	B-7
IC203	F-10
IC2001	B-9
IC2901	E-16
Test Point	
TP2001	D-2
TP2002	E-2
TP2009	E-2
TP2015	D-3
TP2020	B-9
TP2025	A-3
TP2026	B-12
TP2098	D-2
TP2099	D-15
TP GND 1	B-12
Adjustment	
VR2001	G-13
VR2002	B-3
VR2006	E-14
VR2010	C-9
VR2011	E-14
VR2013	C-12
Connector	
P201	G-3
P2001	G-14
P2002	C-16
P2901	G-15

ADDRESS INFORMATION

BRACKETS () ON THIS DIAGRAM IS RECORD MODE
 IF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE

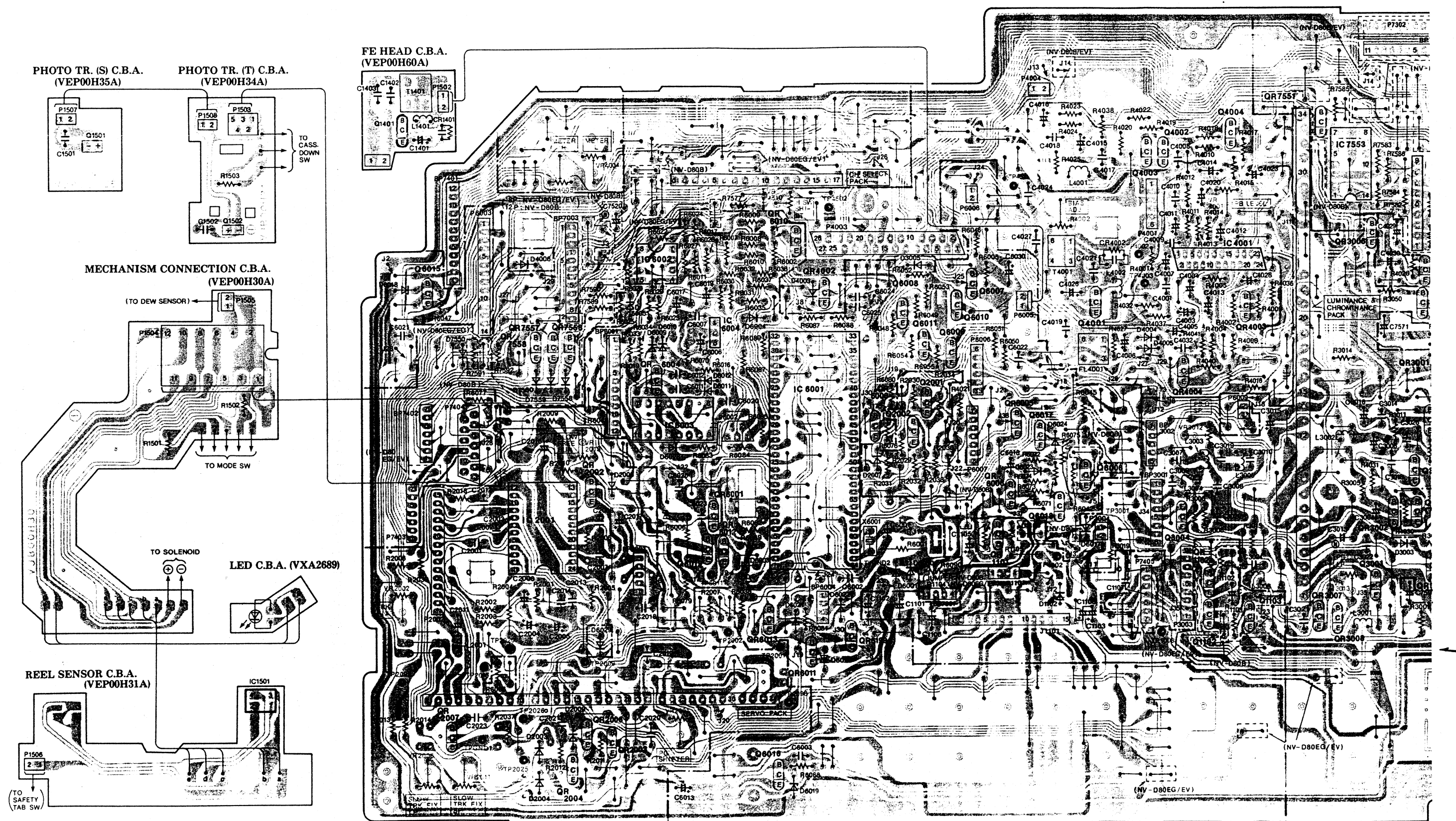
3-17. INDEX SEARCH PACK SCHEMATIC DIAGRAM



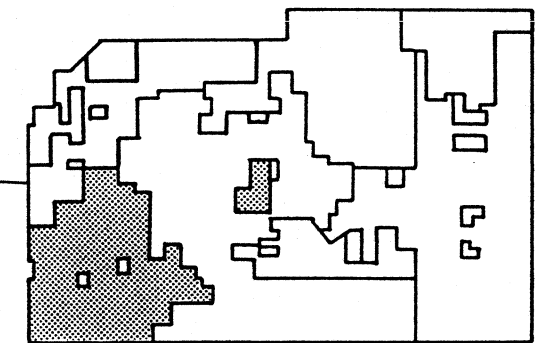
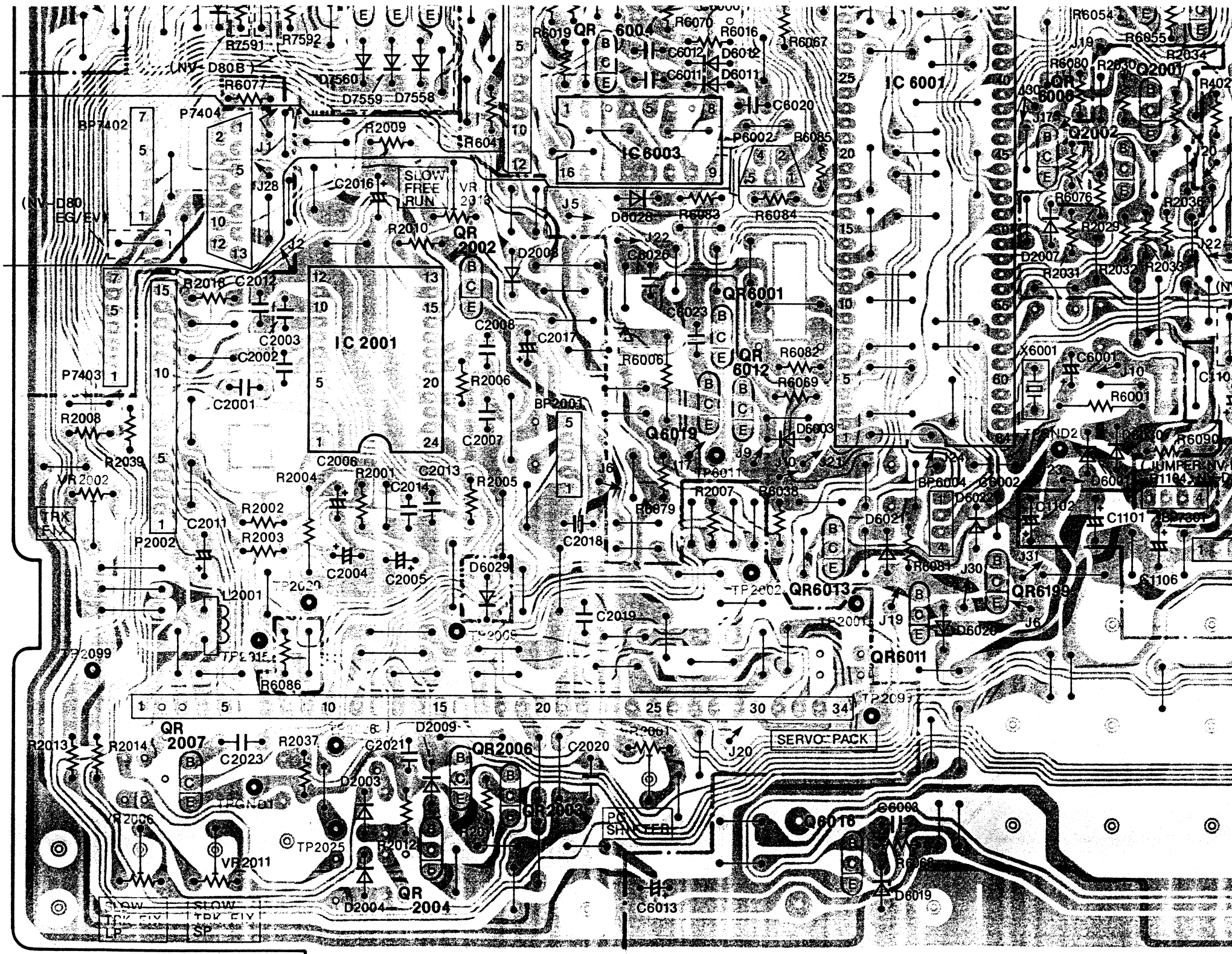
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS () ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.
THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

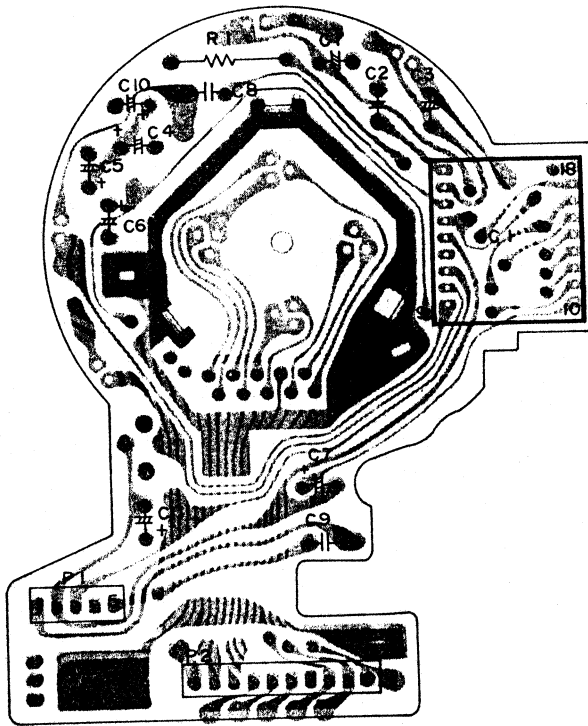
3-11. SYSTEM CONTROL Section In Main C.B.A. (VEP03410A: NV-D80EG) (VEP03410C: NV-D80B) (VEP03410B: NV-D80EV)



3-14. SERVO Section In Main C.B.A. (VEP03410A: NV-D80EG) (VEP03410C: NV-D80B) (VEP03410B: NV-D80EV)

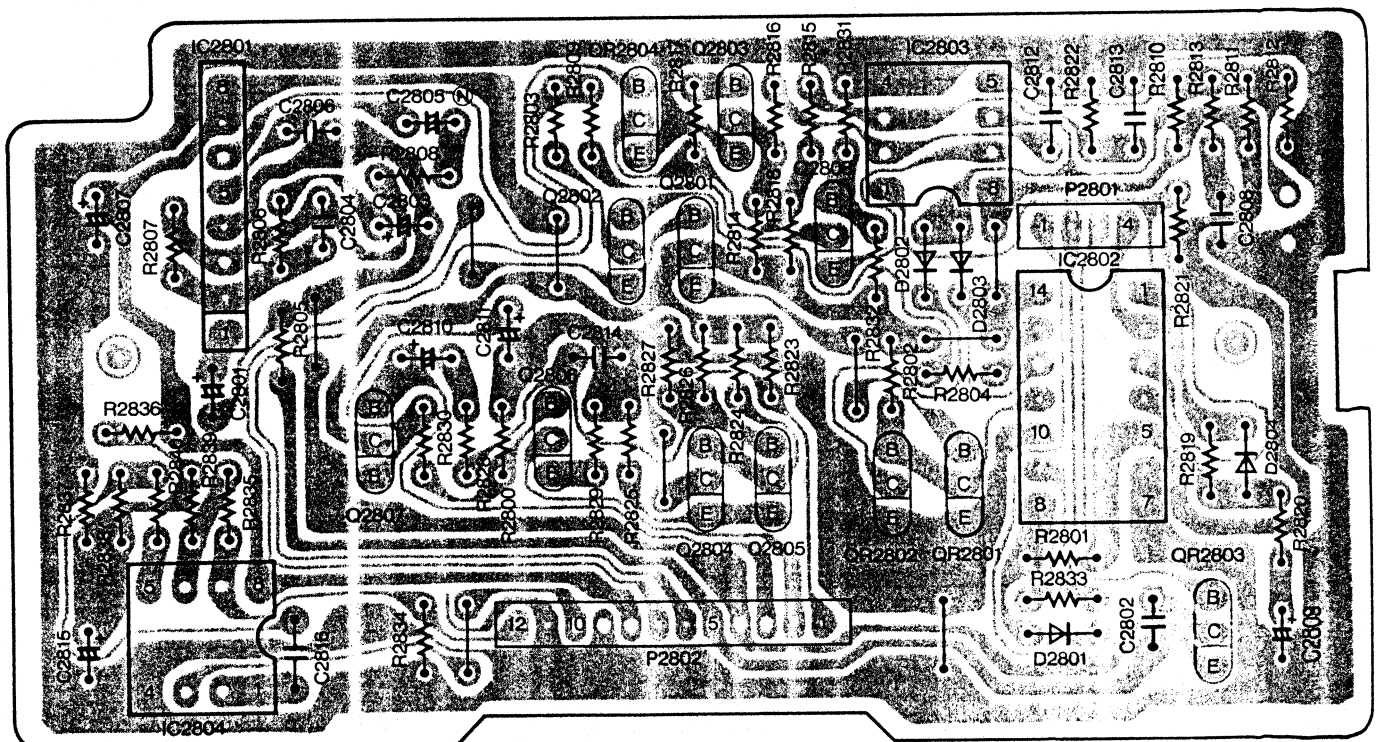


3-15. CYLINDER DRIVE C.B.A. (VEP00H22A)



REF. NO. 2900 SERIES

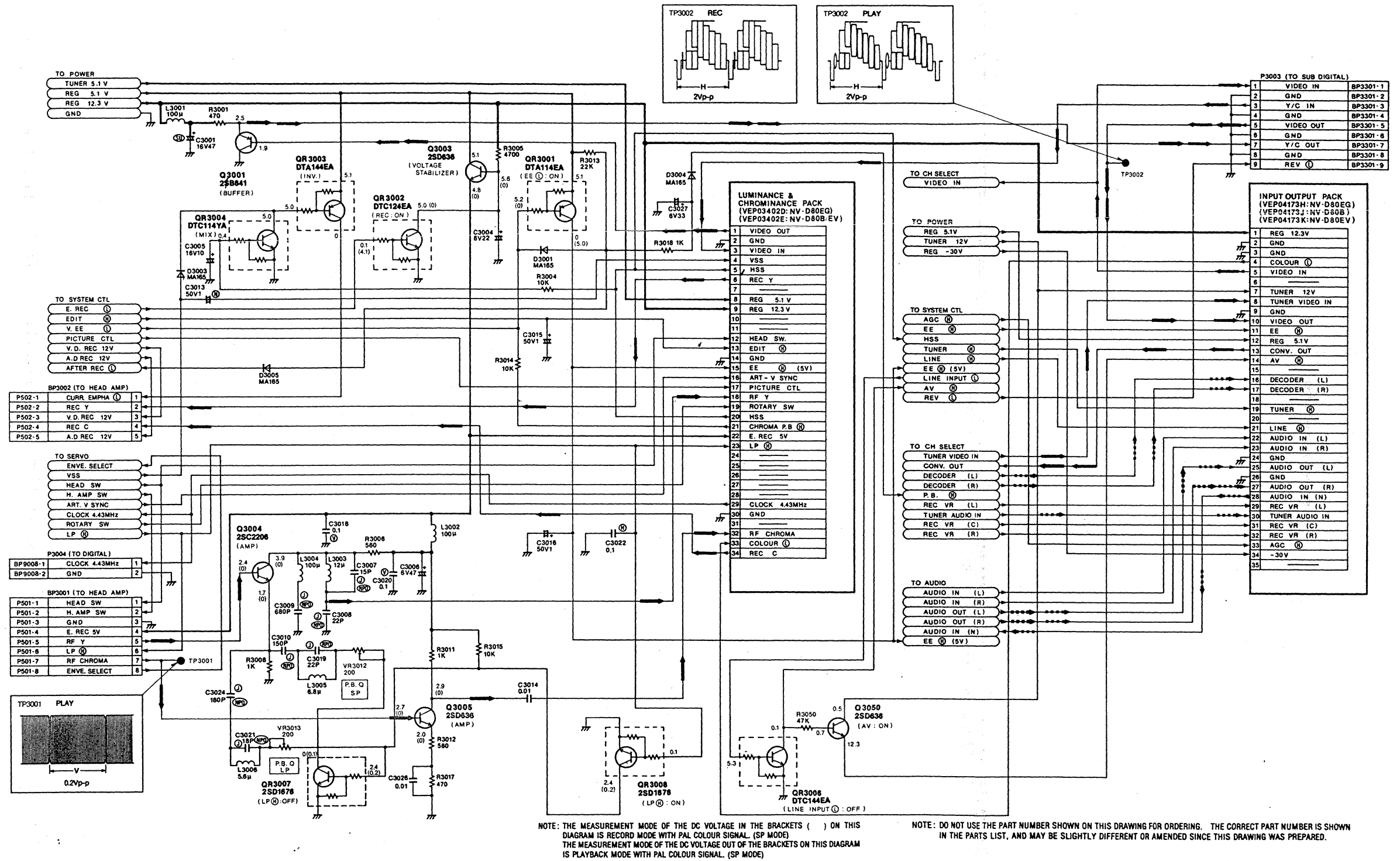
3-16. INDEX SEARCH PACK C.B.A. (VEP02279A)



(VEP03410A: NV-D80EG) (VEP03410C: NV-D80B)
(VEP03410B: NV-D80EV)



3-18. LUMINANCE & CHROMINANCE SCHEMATIC DIAGRAM



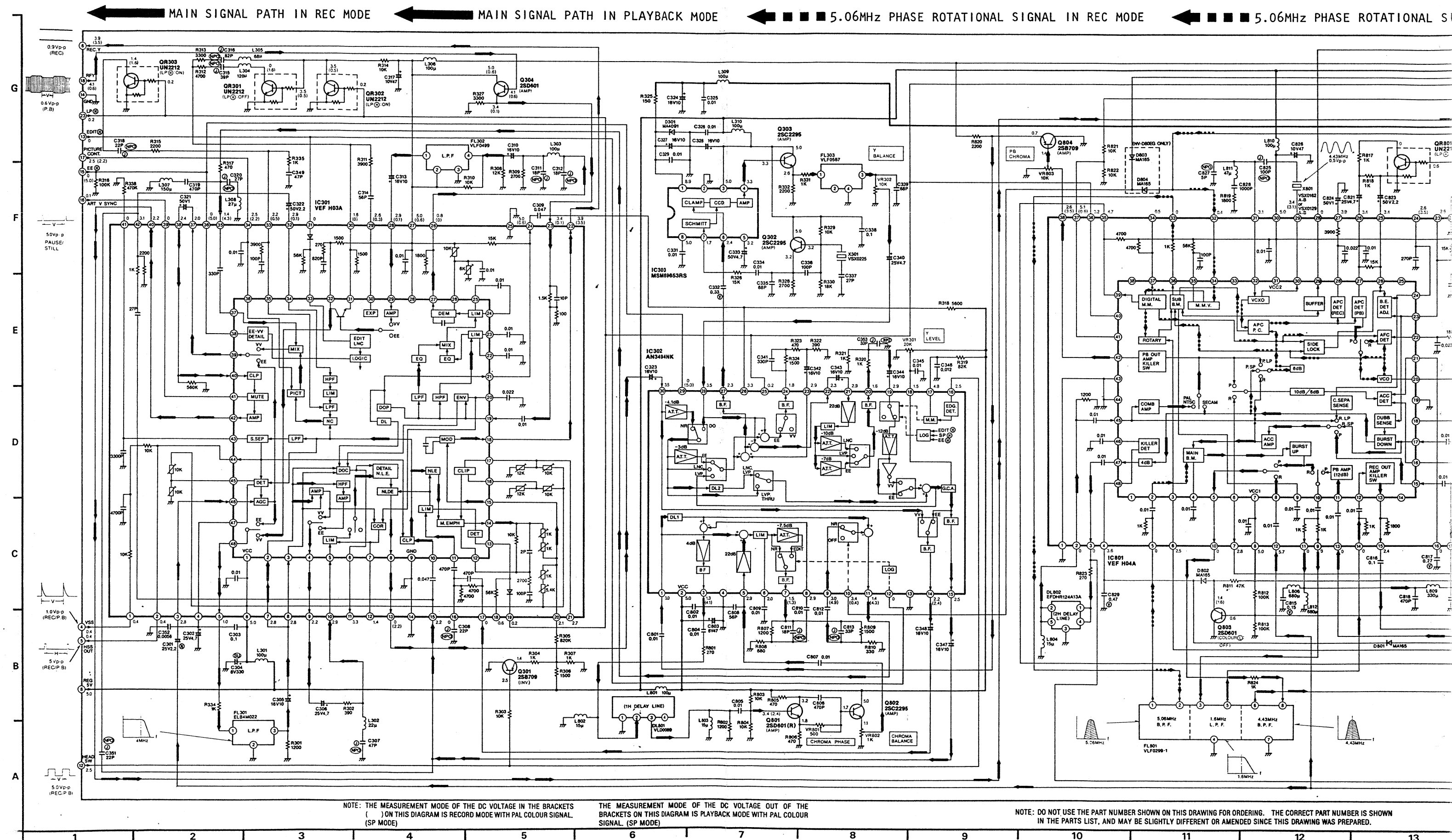
← VIDEO MAIN SIGNAL PATH IN REC MODE

← VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

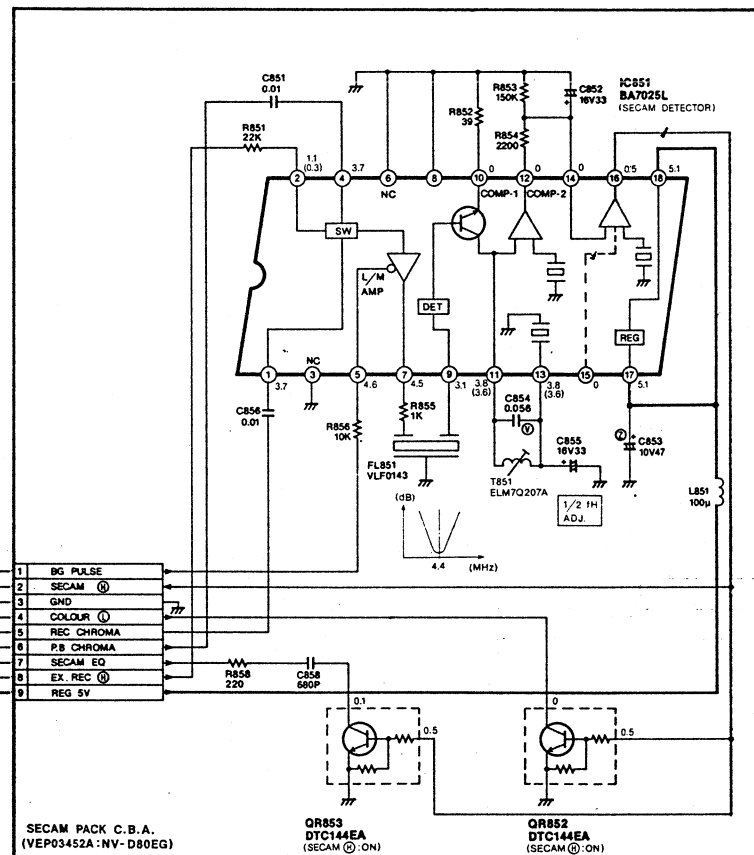
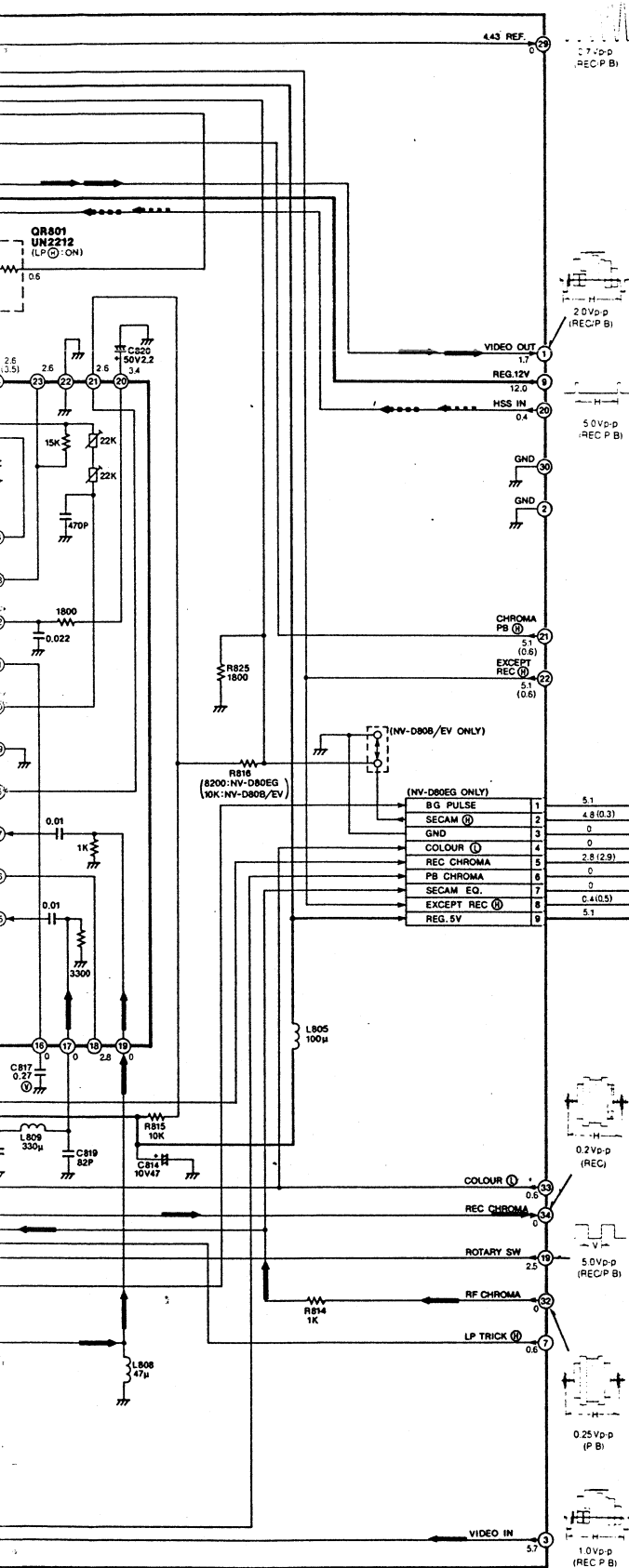
← ■ ■ ■ AUDIO MAIN SIGNAL PATH IN REC MODE

← ■ ■ ■ AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

3-19. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM



AL SIGNAL IN PLAYBACK MODE



LUMINANCE & CHROMINANCE PACK SCHEMATIC	
Transistor	
Q301	B-5
Q302	F-7
Q303	G-7
Q304	G-5
Q801	A-7
Q802	G-10
Q803	B-11
Q804	A-8
Transistor & Resistor	
QR301	G-2
QR302	G-3
QR303	G-2
QR801	F-13
QR852	C-18
QR853	C-17
Integrated Circuit	
IC301	F-3
IC302	E-6
IC303	E-6
IC801	C-10
IC851	F-19
Test Point	
TP301	D-8
Adjustment	
VR301	E-8
VR302	F-8
VR801	A-8
VR802	A-8
VR803	F-10
T851	E-18

ADDRESS INFORMATION

IC301 (VEFH03A)

PIN NO.	WAVEFORM	PIN NO.	WAVEFORM
1	1.0Vp-p (REC/P.B)	28	0.4Vp-p (P.B)
2	5.0Vp-p (REC/P.B)	30	1.2Vp-p (P.B)
3	1.0Vp-p (REC/P.B)	35	0.5Vp-p (P.B)
5	0.6Vp-p (REC)	37, 38	0.8Vp-p (REC)
5	0.6Vp-p (P.B)	37, 38	0.9Vp-p (P.B)
7, 8	0.35Vp-p (REC) 0.5Vp-p (P.B)	39	5.0Vp-p (PAUSE/STILL)
11	0.3Vp-p (REC/P.B)	40	2.0Vp-p (REC/P.B)
13, 15	0.8Vp-p (REC/P.B)	41	0.2Vp-p (REC/P.B)
16	0.6Vp-p (REC/P.B)		
17	0.7Vp-p (REC/P.B)		
22	1.0Vp-p (REC)		
24, 27	0.8Vp-p (P.B)		

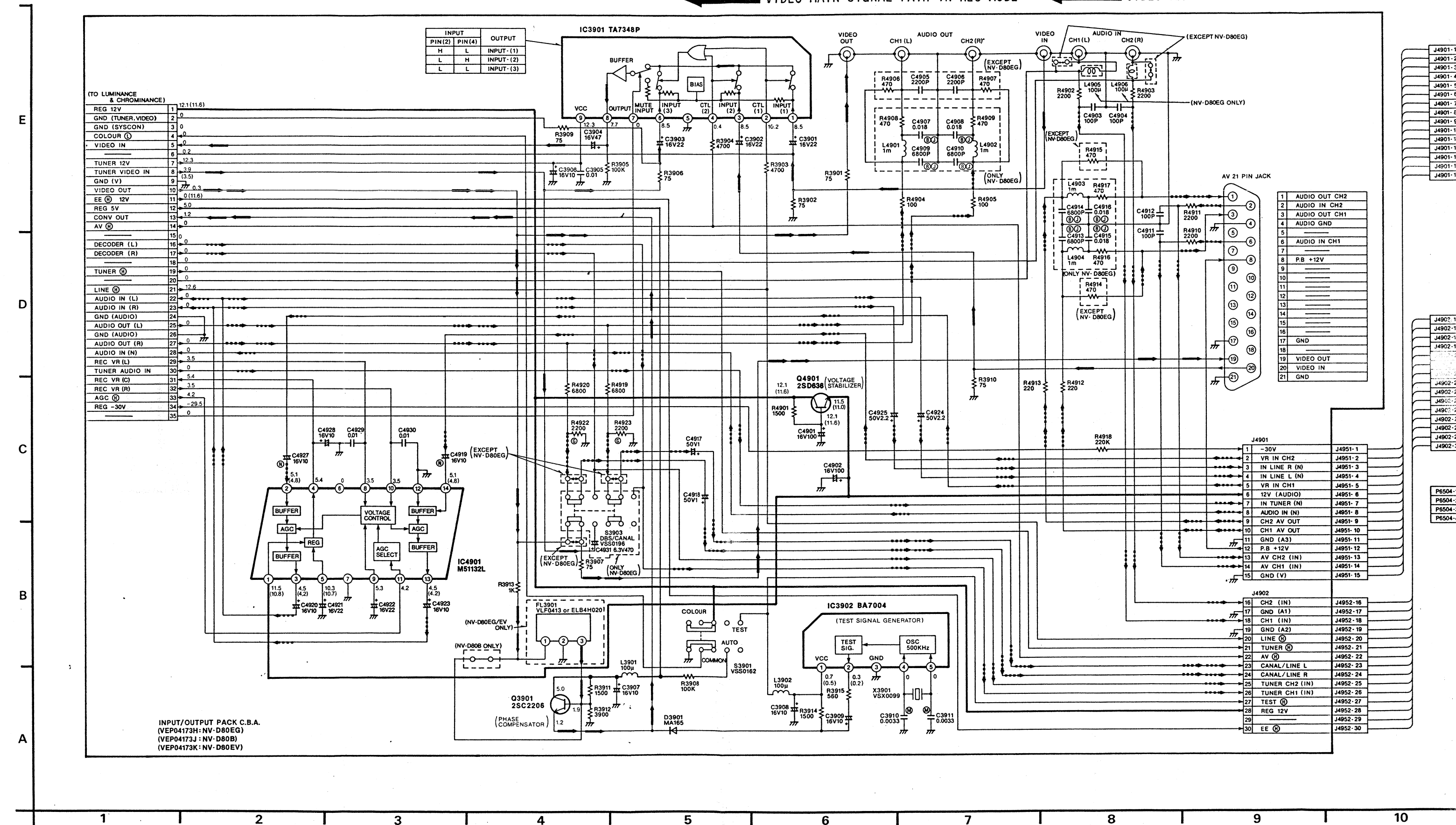
IC801 (VEFH04A)

PIN NO.	WAVEFORM	PIN NO.	WAVEFORM
2	0.15Vp-p (REC/P.B)	15	0.5Vp-p (REC)
3	0.5Vp-p (REC/P.B)	17	0.4Vp-p (REC) 0.3Vp-p (P.B)
5	2.5Vp-p (REC/P.B)	18	1.2Vp-p (REC) 1.0Vp-p (P.B)
6	5.0Vp-p (REC/P.B)	19	0.2Vp-p (REC/P.B)
7	0.6Vp-p (REC) 0.5Vp-p (P.B)	28	0.7Vp-p (REC/P.B)
9	0.4Vp-p (REC/P.B)	29	1.0Vp-p (REC/P.B)
10	1.0Vp-p (REC)	31	0.7Vp-p (REC/P.B)
10	0.4Vp-p (P.B)	32	5.0Vp-p (REC/P.B)
11	0.4Vp-p (REC) 0.2Vp-p (P.B)	33	0.35Vp-p (REC/P.B)
12	1.0Vp-p (REC/P.B)	34	5.0Vp-p (REC/P.B)
13	0.3Vp-p (P.B)	35	5.0Vp-p (REC/P.B)
14	0.3Vp-p (REC) 0.2Vp-p (P.B)	38	1.0Vp-p (P.B)

3-23. INPUT/OUTPUT PACK & SUB INPUT/OUTPUT SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE



SIGNAL PATH IN PLAYBACK MODE

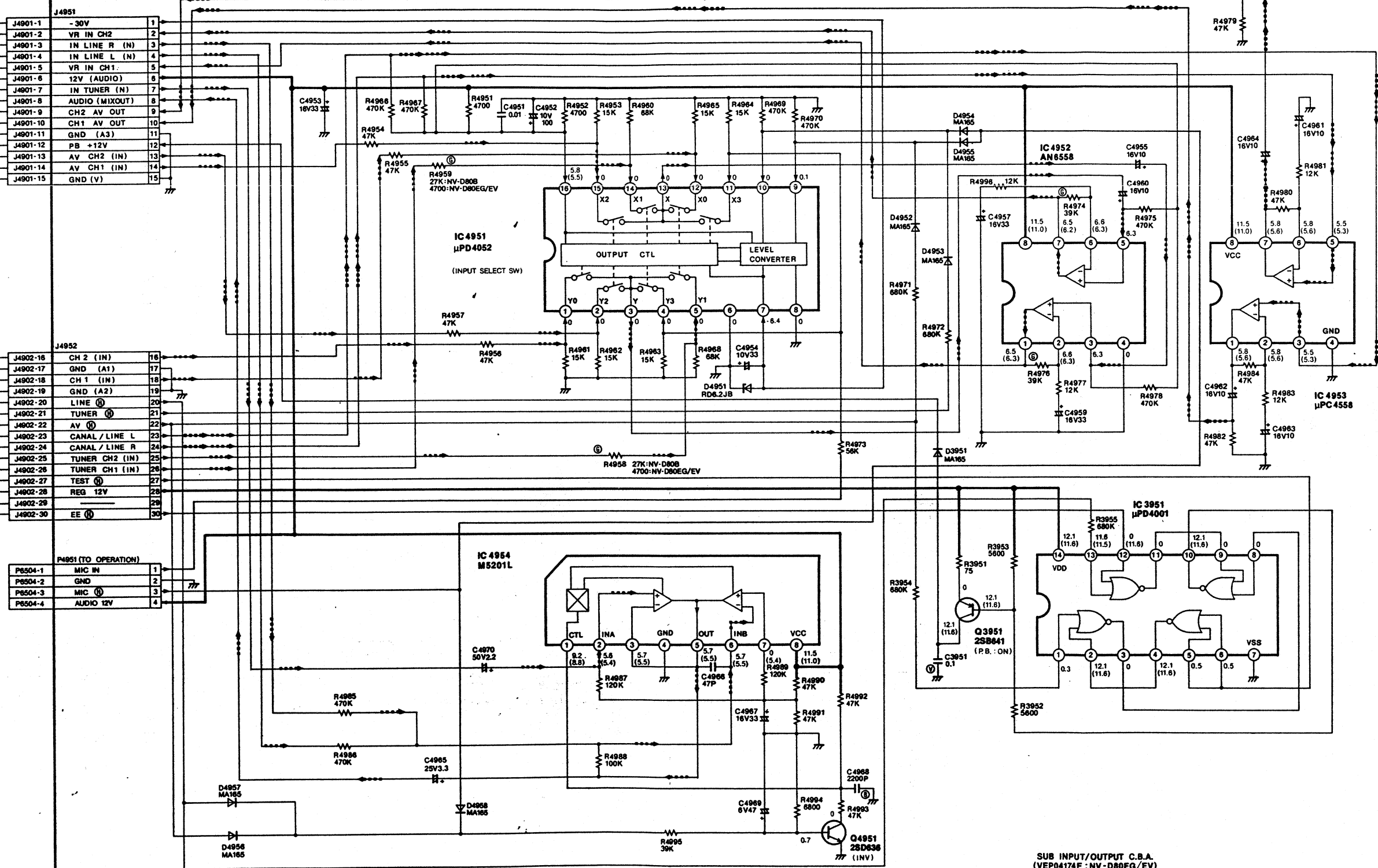
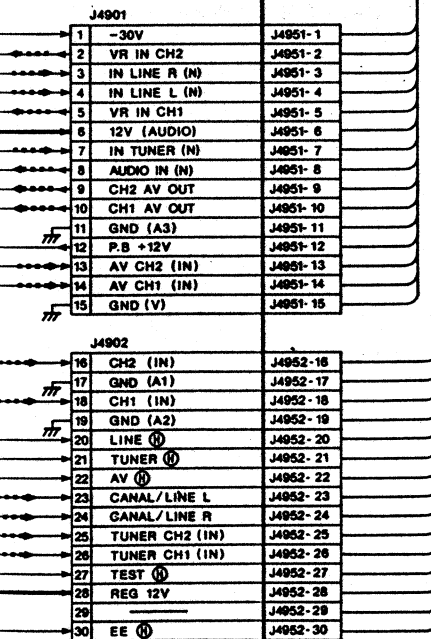
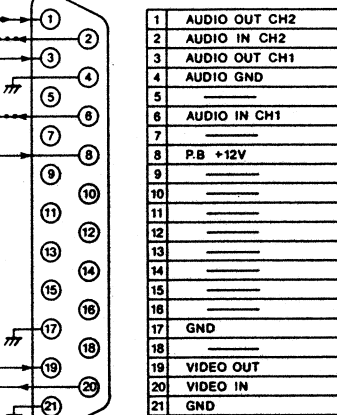
■ ■ ■ AUDIO MAIN SIGNAL PATH IN REC MODE

■ ■ ■ AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

PT NV-D80EG

D80EG ONLY

AV 21 PIN JACK



NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

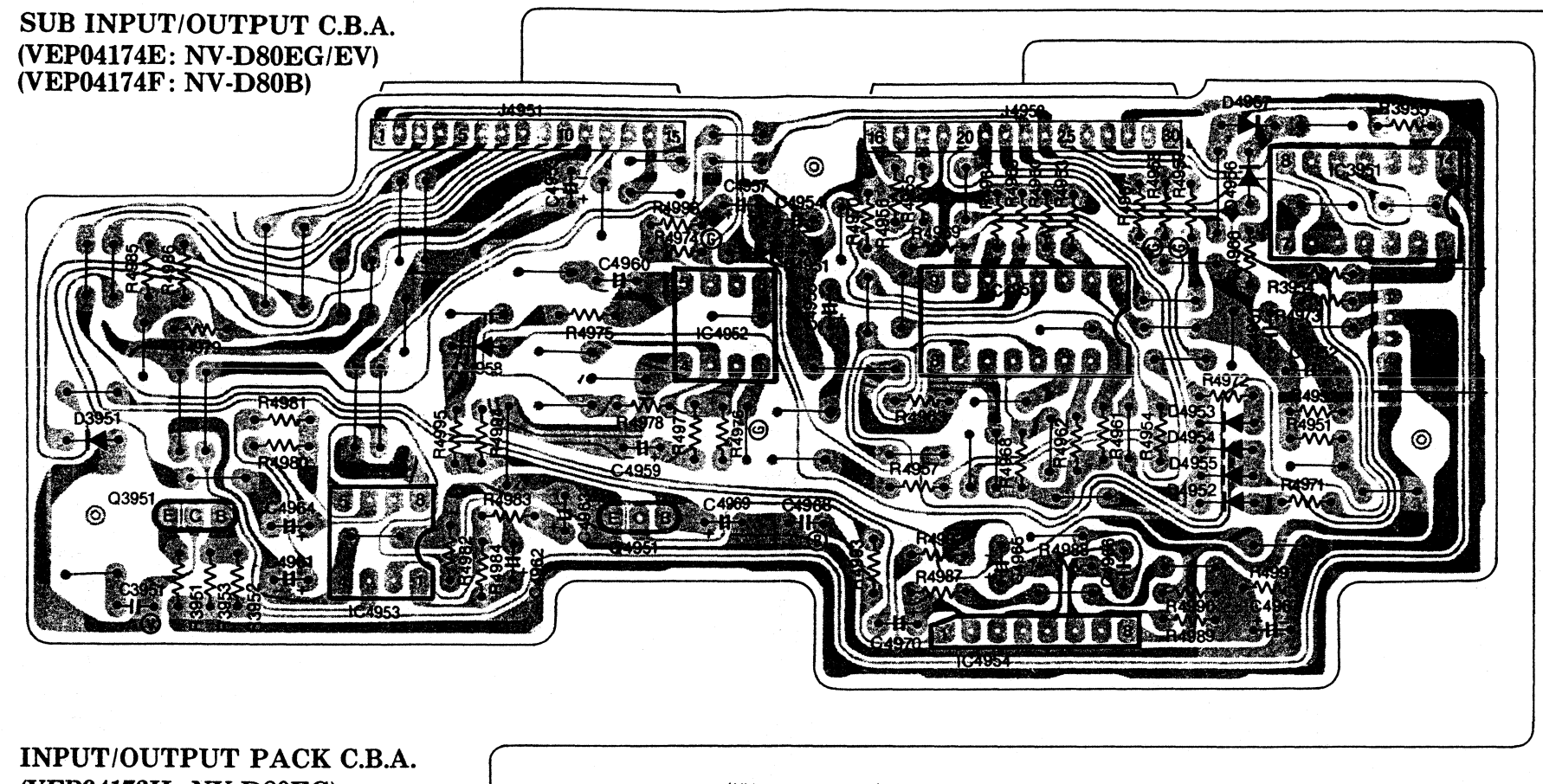
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS () ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE) THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

SUB INPUT/OUTPUT C.B.A.
(VEP04174E: NV-D80EG/EV)
(VEP04174F: NV-D80B)

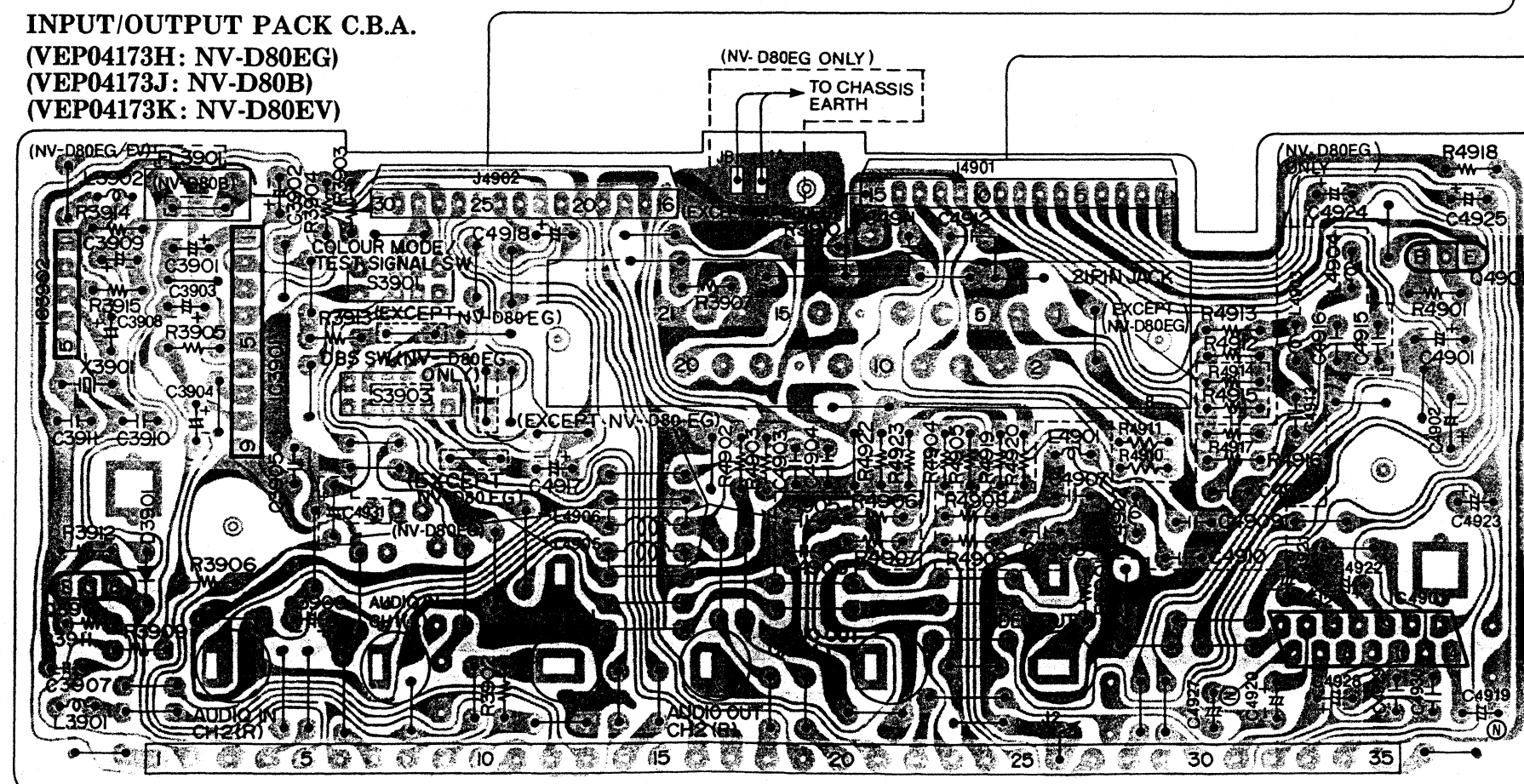
3-24. INPUT/OUTPUT PACK C.B.A. (VEP04173H: NV-D80EG) (VEP04173J: NV-D80B) (VEP04173K: NV-D80EV)
& SUB INPUT/OUTPUT C.B.A. (VEP04174E: NV-D80EG/EV) (VEP04174F: NV-D80B)

INPUT/OUTPUT PACK SCHEMATIC	
Transistor	
Q3901	A-4
Q3951	B-16
Q4901	C-6
Q4951	A-15
Integrated Circuit	
IC3901	E-4
IC3902	B-6
IC3951	C-17
IC4901	B-3
IC4951	D-13
IC4952	E-16
IC4953	D-18
IC4954	C-13
Connector	
P4951	C-11
J4901	C-9
J4902	B-9
J4951	E-11
J4952	D-11

ADDRESS INFORMATION

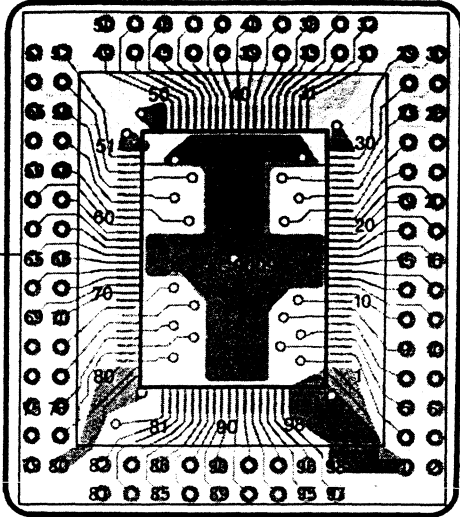


INPUT/OUTPUT PACK C.B.A.
(VEP04173H: NV-D80EG)
(VEP04173J: NV-D80B)
(VEP04173K: NV-D80EV)

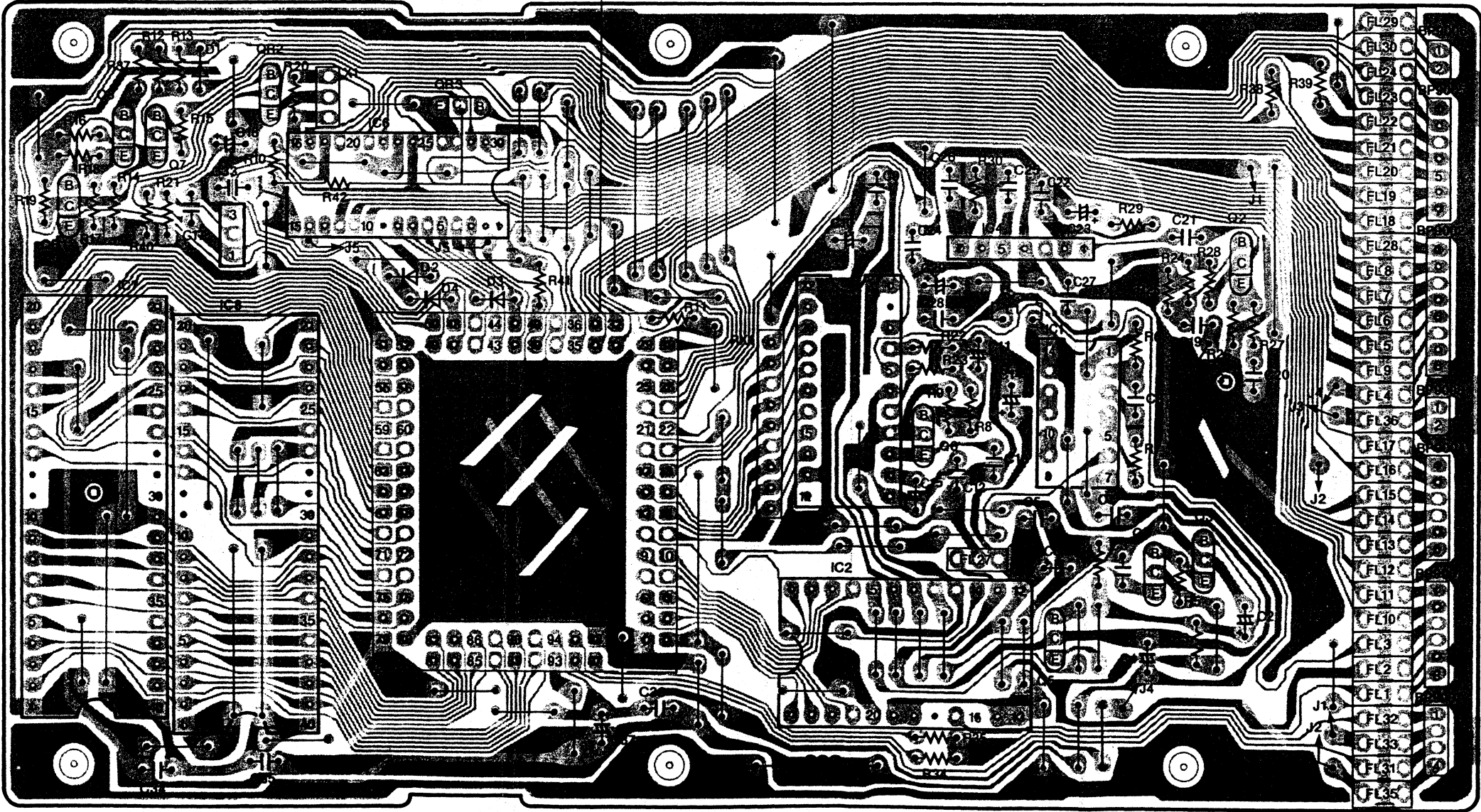


3-25. DIGITAL C.B.A. (VEP03413A)

GATE ARRAY C.B.A. (VEP00J43A)



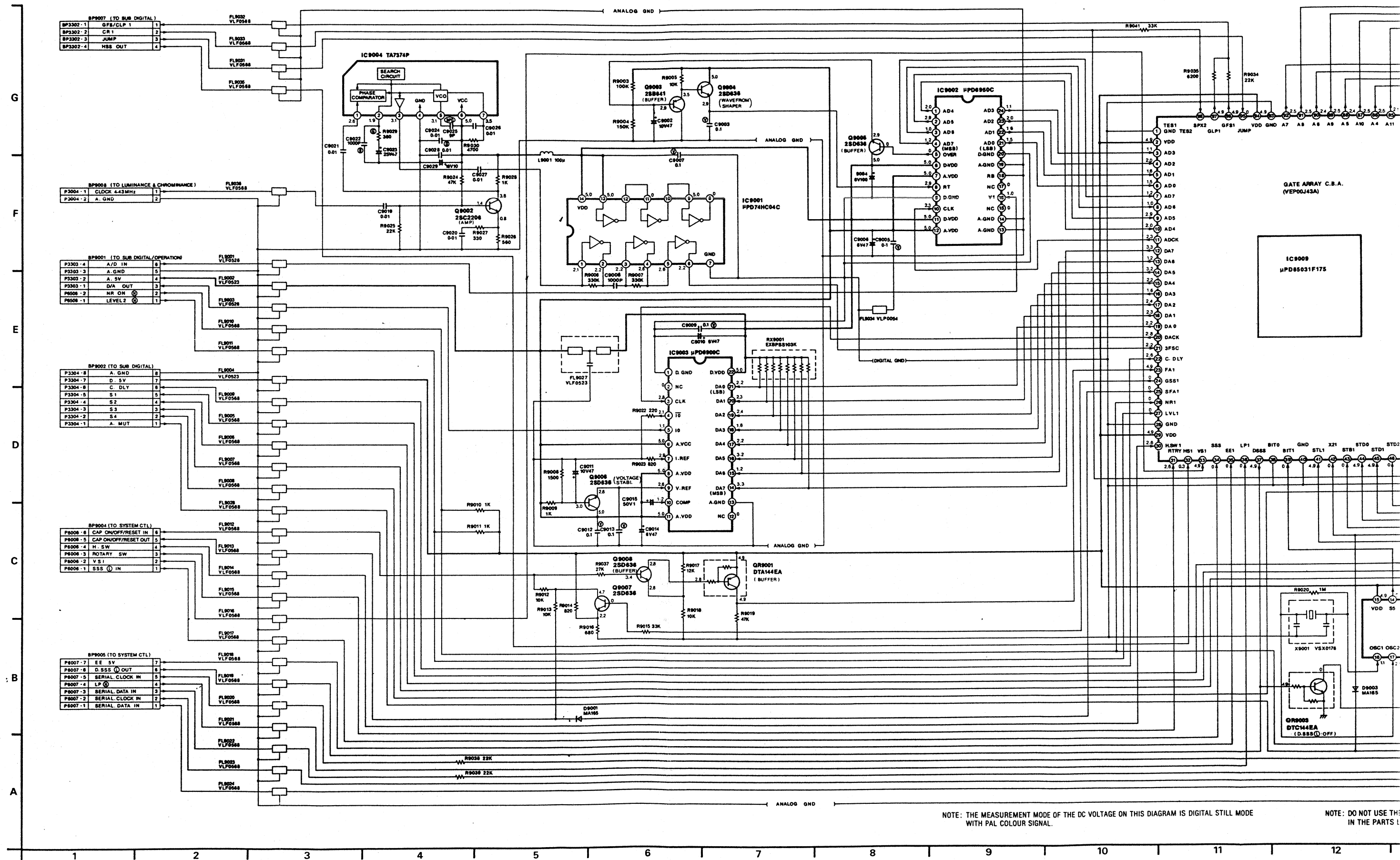
DIGITAL C.B.A. (VEP03413A)

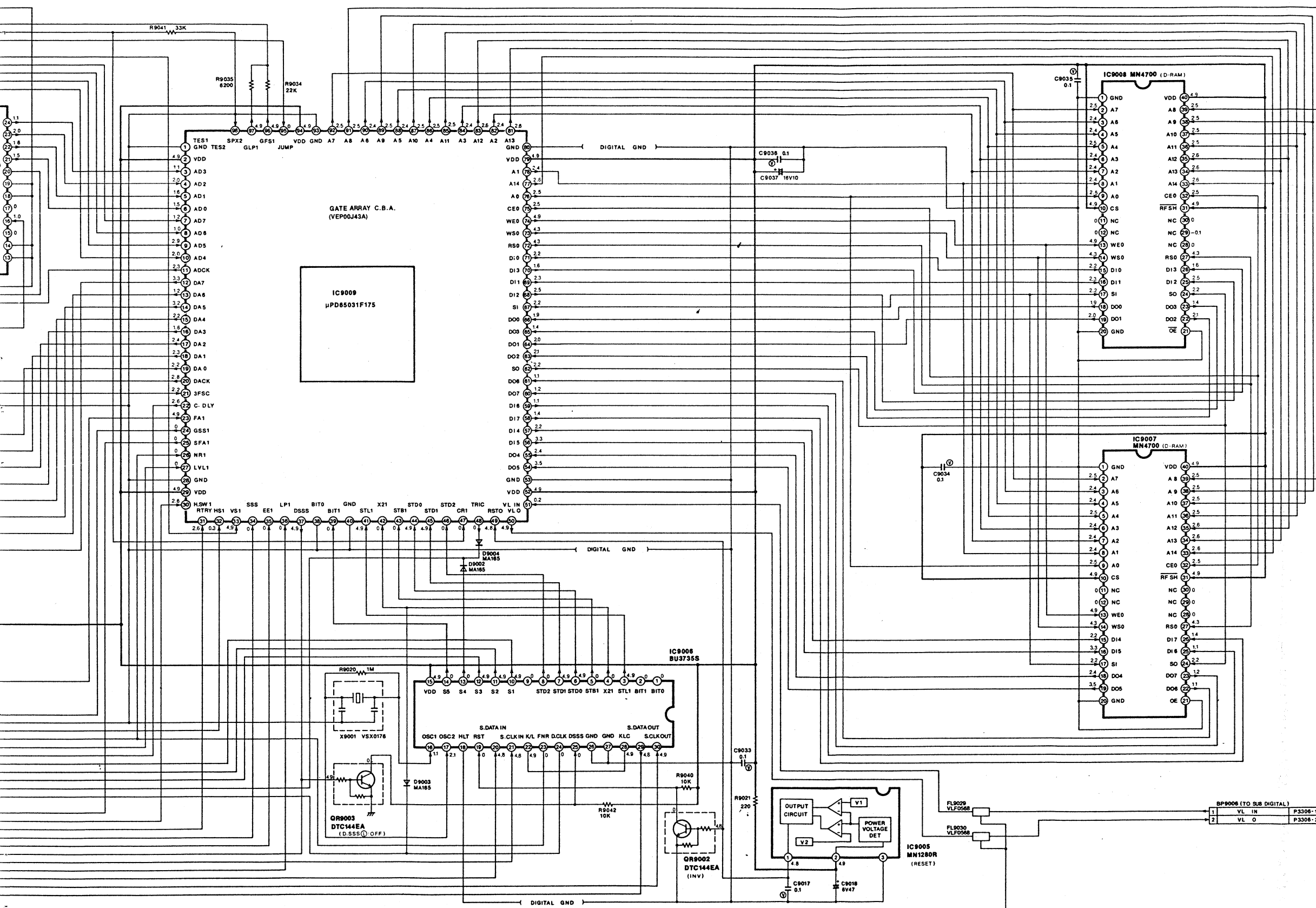


REF. NO. 9000 SERIES

Back Page:
INPUT/OUTPUT Section

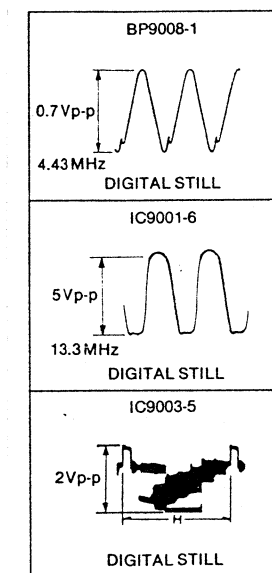
3-26. DIGITAL SCHEMATIC DIAGRAM





DIGITAL SCHEMATIC	
Transistor	
Q9002	F-4
Q9003	G-6
Q9004	G-7
Q9005	G-8
Q9006	D-6
Q9007	C-6
Q9008	C-6
Transistor & Resistor	
QR9001	C-7
QR9002	A-14
QR9003	A-12
Integrated Circuit	
IC9001	F-7
IC9002	G-9
IC9003	E-6
IC9004	G-4
IC9005	A-16
IC9006	C-4
IC9007	D-18
IC9008	G-18
IC9009	E-12
Connector	
BP9001	F-1
BP9002	E-1
BP9004	C-1
BP9005	B-1
BP9006	B-18
BP9007	G-1
BP9008	F-1

ADDRESS INFORMATION



MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS DIGITAL STILL MODE COLOUR SIGNAL.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

The diagram illustrates the internal circuitry of a video receiver, organized into several functional blocks and sections labeled A through G. Key components include integrated circuits (ICs) such as TA7348P, TA7348P, BA7023L, and various transistors (Q3301-Q3328) and diodes (D3301-D3305). The circuit handles video signals from multiple sources (P3301-P3309) and includes a 15V regulator (Q3329) and a 5V regulator (Q3330). It also features a chroma delay line (DL3301) and a chroma B.P.F. (FL3303). The diagram is annotated with component values (resistors, capacitors, inductors) and pin connections. A note at the bottom right states: "NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS DIGITAL STILL MODE WITH PAL COLOUR SIGNAL."

BP3301 (TO LUMINANCE & CHROMINANCE)

P3301-1	VIDEO IN	1
P3301-2	GND	2
P3301-3	Y/C IN	3
P3301-4	GND	4
P3301-5	VIDEO OUT	5
P3301-6	GND	6
P3301-7	Y/C OUT	7
P3301-8	GND	8
P3301-9	REV. ON	9

P3302 (TO DIGITAL)

BP9007-1	GFS / GLP 1	1
BP9007-2	CR 1	2
BP9007-3	JUMP	3
BP9007-4	HSS OUT	4

Q3301 TA7348P (A/D CONV. INPUT SELECT)

Q3302 TA7348P (DIGITAL N.R. INPUT SELECT)

Q3303 BA7023L (V-KILLER)

Q3304 TA7348P (Y/C PACK INPUT SELECT)

Q3305 TA7348P (VIDEO OUTPUT SELECT)

Q3306 TA7348P (VIDEO AMP)

Q3307 TA7348P (MIX)

Q3308 TA7348P (MIX)

Q3309 TA7348P (MIX)

Q3310 TA7348P (MIX)

Q3311 TA7348P (MIX)

Q3312 TA7348P (MIX)

Q3313 TA7348P (MIX)

Q3314 TA7348P (MIX)

Q3315 TA7348P (MIX)

Q3316 TA7348P (MIX)

Q3317 TA7348P (MIX)

Q3318 TA7348P (MIX)

Q3319 TA7348P (MIX)

Q3320 TA7348P (MIX)

Q3321 TA7348P (MIX)

Q3322 TA7348P (MIX)

Q3323 TA7348P (MIX)

Q3324 TA7348P (MIX)

Q3325 TA7348P (MIX)

Q3326 TA7348P (MIX)

Q3327 TA7348P (MIX)

Q3328 TA7348P (MIX)

Q3329 TA7348P (MIX)

Q3330 TA7348P (MIX)

Q3331 TA7348P (MIX)

Q3332 TA7348P (MIX)

Q3333 TA7348P (MIX)

Q3334 TA7348P (MIX)

Q3335 TA7348P (MIX)

Q3336 TA7348P (MIX)

Q3337 TA7348P (MIX)

Q3338 TA7348P (MIX)

Q3339 TA7348P (MIX)

Q3340 TA7348P (MIX)

Q3341 TA7348P (MIX)

Q3342 TA7348P (MIX)

Q3343 TA7348P (MIX)

Q3344 TA7348P (MIX)

Q3345 TA7348P (MIX)

Q3346 TA7348P (MIX)

Q3347 TA7348P (MIX)

Q3348 TA7348P (MIX)

Q3349 TA7348P (MIX)

Q3350 TA7348P (MIX)

Q3351 TA7348P (MIX)

Q3352 TA7348P (MIX)

Q3353 TA7348P (MIX)

Q3354 TA7348P (MIX)

Q3355 TA7348P (MIX)

Q3356 TA7348P (MIX)

Q3357 TA7348P (MIX)

Q3358 TA7348P (MIX)

Q3359 TA7348P (MIX)

Q3360 TA7348P (MIX)

Q3361 TA7348P (MIX)

Q3362 TA7348P (MIX)

Q3363 TA7348P (MIX)

Q3364 TA7348P (MIX)

Q3365 TA7348P (MIX)

Q3366 TA7348P (MIX)

Q3367 TA7348P (MIX)

Q3368 TA7348P (MIX)

Q3369 TA7348P (MIX)

Q3370 TA7348P (MIX)

Q3371 TA7348P (MIX)

Q3372 TA7348P (MIX)

Q3373 TA7348P (MIX)

Q3374 TA7348P (MIX)

Q3375 TA7348P (MIX)

Q3376 TA7348P (MIX)

Q3377 TA7348P (MIX)

Q3378 TA7348P (MIX)

Q3379 TA7348P (MIX)

Q3380 TA7348P (MIX)

Q3381 TA7348P (MIX)

Q3382 TA7348P (MIX)

Q3383 TA7348P (MIX)

Q3384 TA7348P (MIX)

Q3385 TA7348P (MIX)

Q3386 TA7348P (MIX)

Q3387 TA7348P (MIX)

Q3388 TA7348P (MIX)

Q3389 TA7348P (MIX)

Q3390 TA7348P (MIX)

Q3391 TA7348P (MIX)

Q3392 TA7348P (MIX)

Q3393 TA7348P (MIX)

Q3394 TA7348P (MIX)

Q3395 TA7348P (MIX)

Q3396 TA7348P (MIX)

Q3397 TA7348P (MIX)

Q3398 TA7348P (MIX)

Q3399 TA7348P (MIX)

Q3400 TA7348P (MIX)

Q3401 TA7348P (MIX)

Q3402 TA7348P (MIX)

Q3403 TA7348P (MIX)

Q3404 TA7348P (MIX)

Q3405 TA7348P (MIX)

Q3406 TA7348P (MIX)

Q3407 TA7348P (MIX)

Q3408 TA7348P (MIX)

Q3409 TA7348P (MIX)

Q3410 TA7348P (MIX)

Q3411 TA7348P (MIX)

Q3412 TA7348P (MIX)

Q3413 TA7348P (MIX)

Q3414 TA7348P (MIX)

Q3415 TA7348P (MIX)

Q3416 TA7348P (MIX)

Q3417 TA7348P (MIX)

Q3418 TA7348P (MIX)

Q3419 TA7348P (MIX)

Q3420 TA7348P (MIX)

Q3421 TA7348P (MIX)

Q3422 TA7348P (MIX)

Q3423 TA7348P (MIX)

Q3424 TA7348P (MIX)

Q3425 TA7348P (MIX)

Q3426 TA7348P (MIX)

Q3427 TA7348P (MIX)

Q3428 TA7348P (MIX)

Q3429 TA7348P (MIX)

Q3430 TA7348P (MIX)

Q3431 TA7348P (MIX)

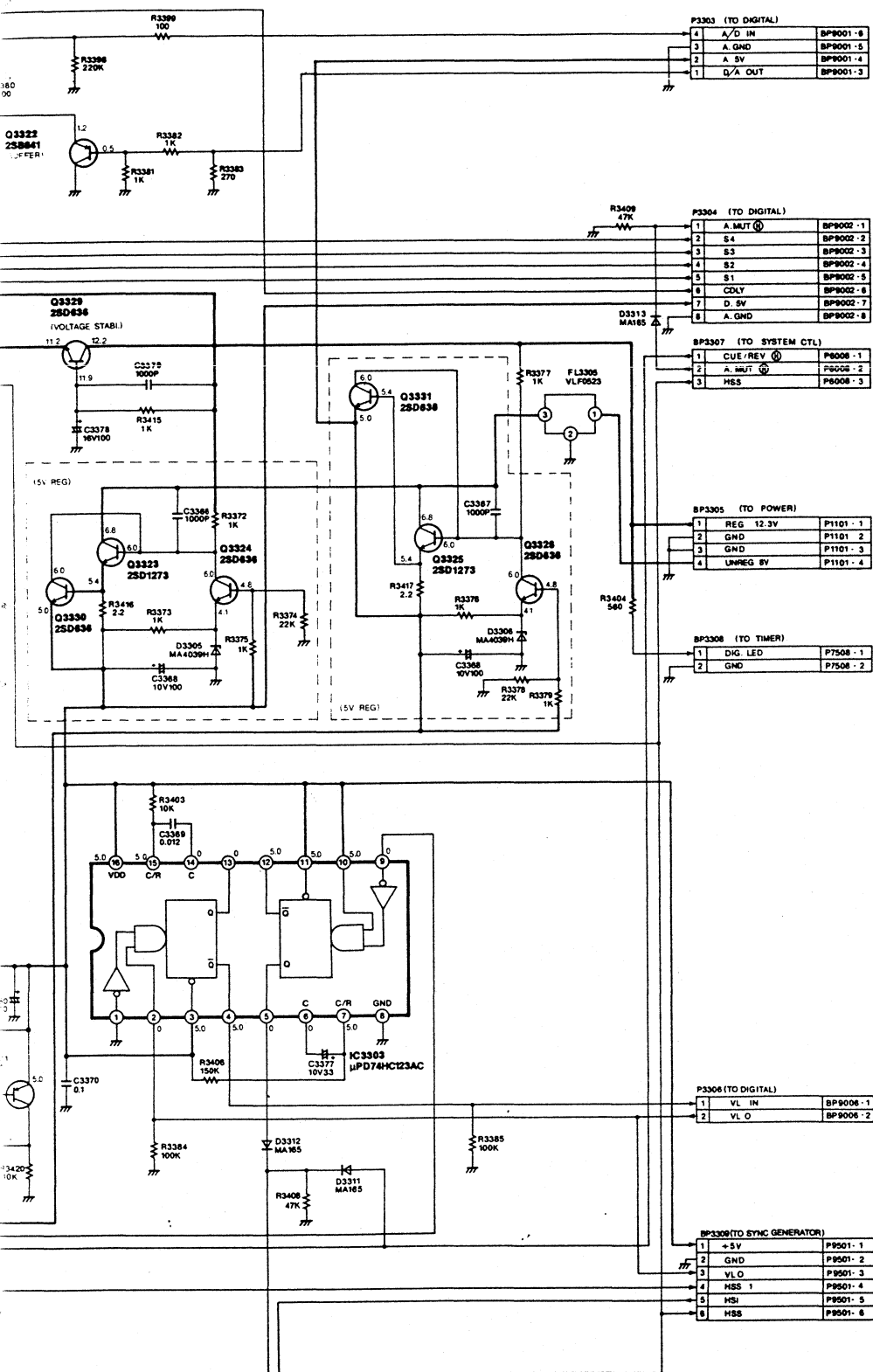
Q3432 TA7348P (MIX)

Q3433 TA7348P (MIX)

Q3434 TA7348P (MIX)

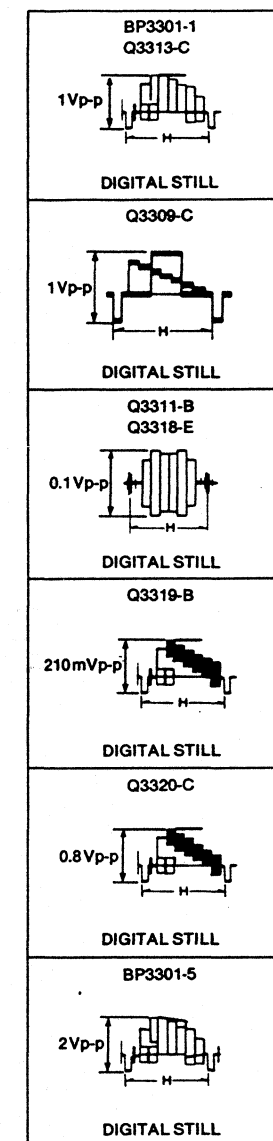
Q3435

NOTE: DO NOT USE THE IN THE CORRECT PAGE SLIGHTLY DIFFERENT

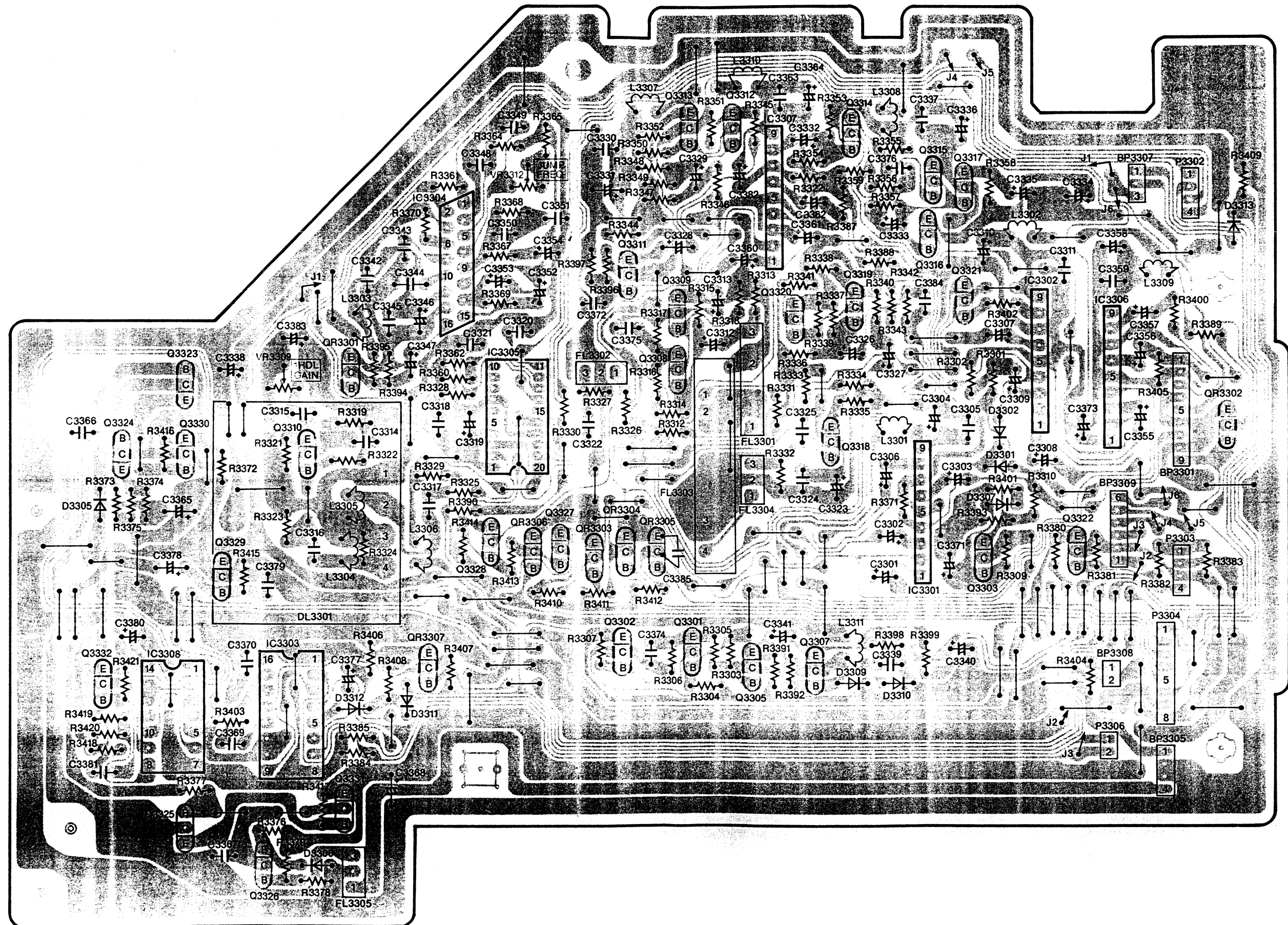


SUB DIGITAL SCHEMATIC			
Transistor		Integrated Circuit	
Q3301	G-5	QR3303	G-7
Q3302	G-6	QR3304	G-8
Q3303	G-3	QR3305	G-9
Q3305	G-6	QR3306	G-9
Q3307	G-7	QR3307	A-9
Q3308	D-4	Adjustmen	
Q3309	D-4		
Q3310	C-3		
Q3311	B-7		
Q3312	A-7		
Q3313	A-8		
Q3314	C-7		
Q3315	C-7	Connector	
Q3316	C-8		
Q3317	B-8	Adjustmen	
Q3318	A-5		
Q3319	A-5	Connector	
Q3320	A-6		
Q3321	D-4	Adjustmen	
Q3322	G-11		
Q3323	E-11	Connector	
Q3324	E-12		
Q3325	E-13	Adjustmen	
Q3326	E-13		
Q3327	G-9	Connector	
Q3328	G-10		
Q3329	F-11	Adjustmen	
Q3330	E-11		
Q3331	F-12	Connector	
Q3332	B-11		
Transistor & Resistor		Connector	
QR3301	E-8	P3302	D-1
QR3302	F-2	P3303	G-14
		P3304	G-14
		P3306	B-14
		BP3301	F-1
		BP3305	E-14
		BP3307	F-14
		BP3308	E-14
		BP3309	B-14

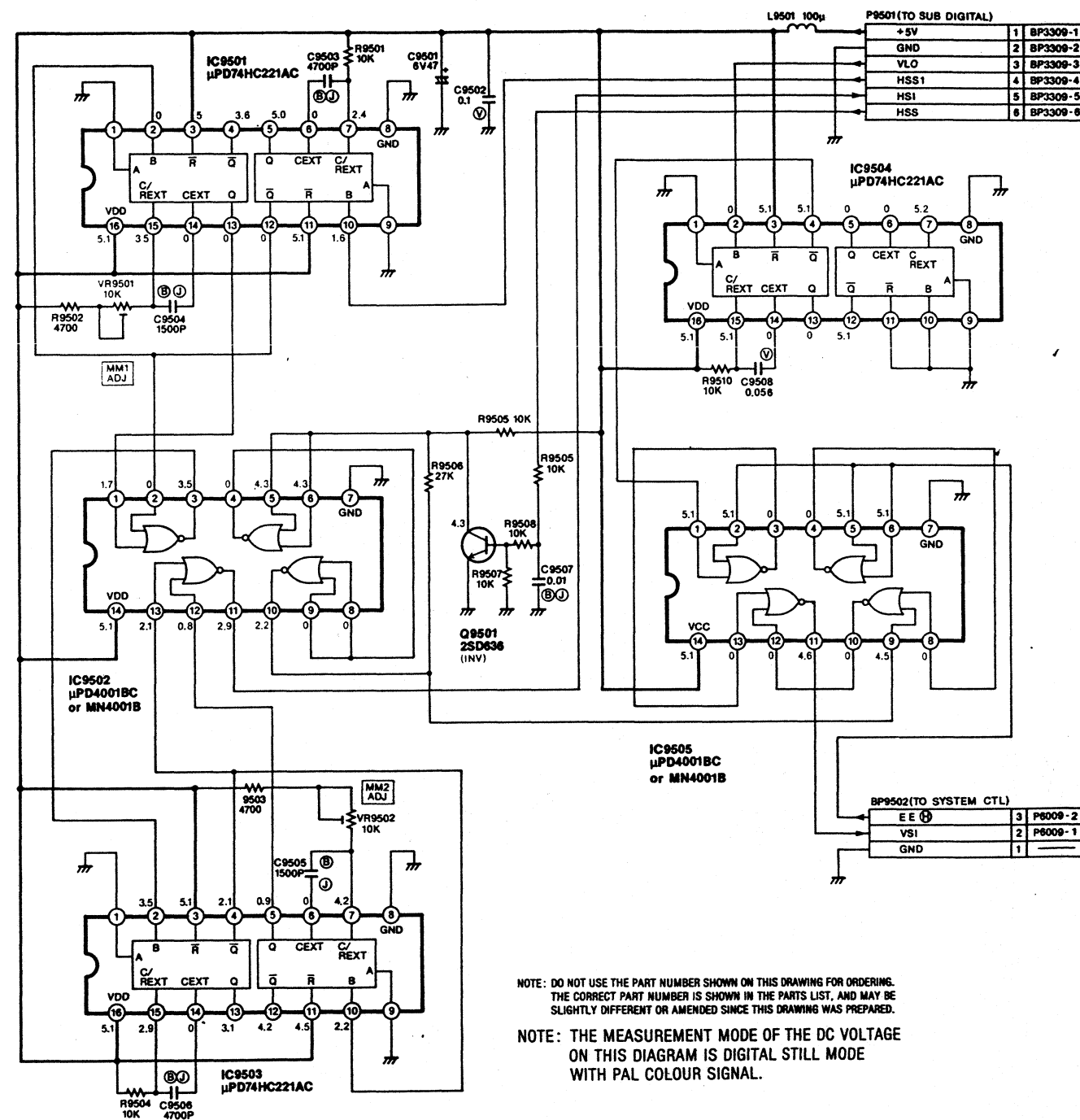
ADDRESS INFORMATION



3-28. SUB DIGITAL C.B.A. (VEP03414A)



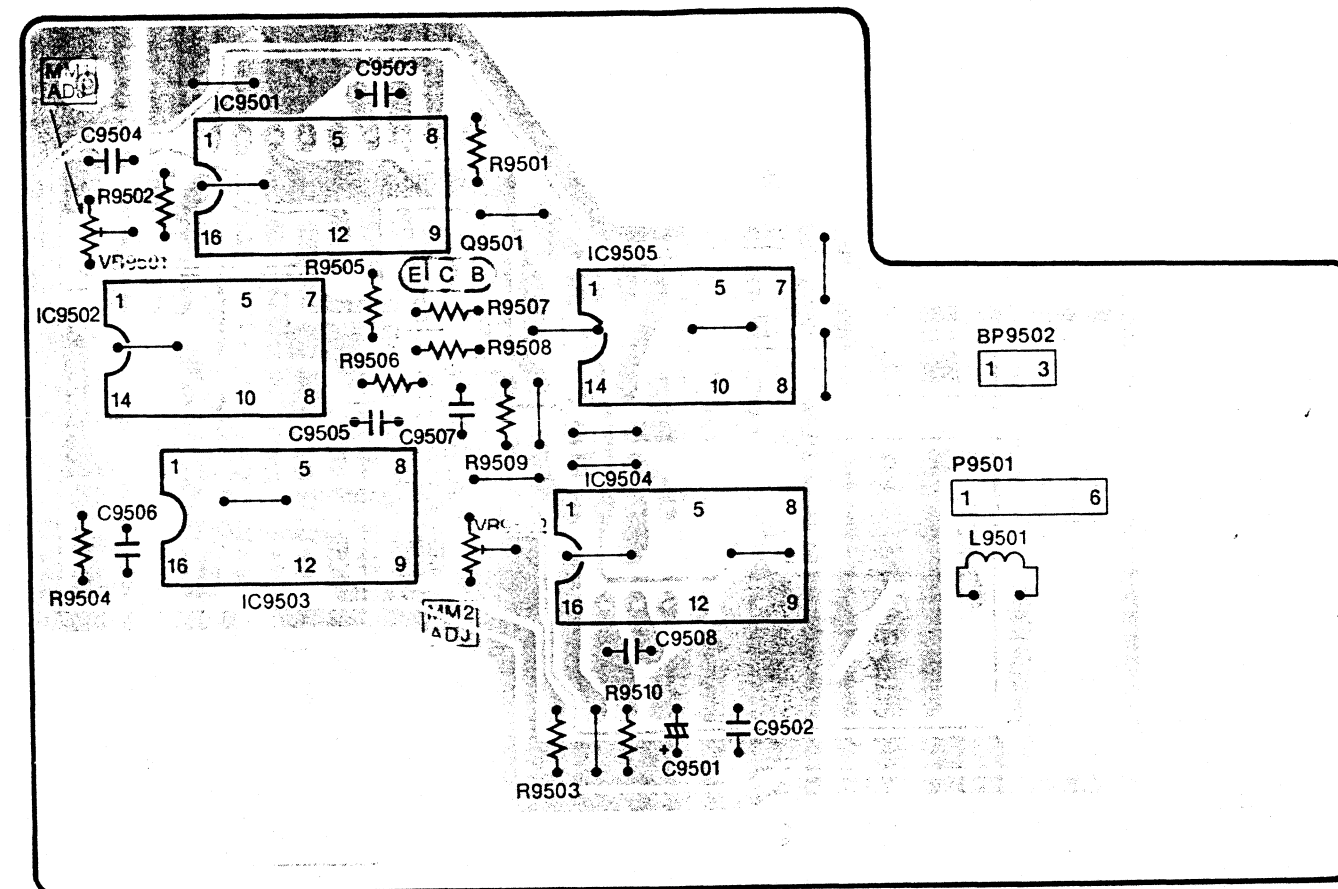
3-29. SYNC GENERATOR SCHEMATIC DIAGRAM



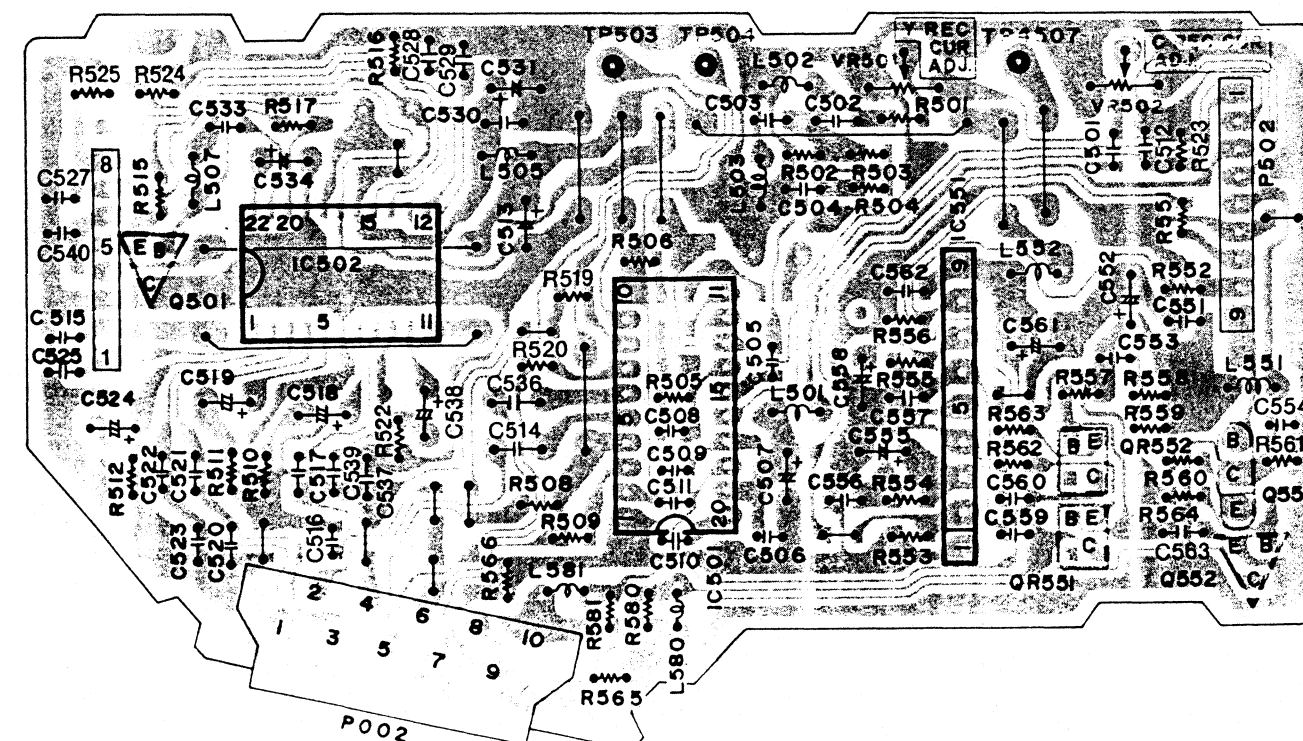
**NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.
THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE
SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.**

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS DIGITAL STILL MODE WITH PAL COLOUR SIGNAL.

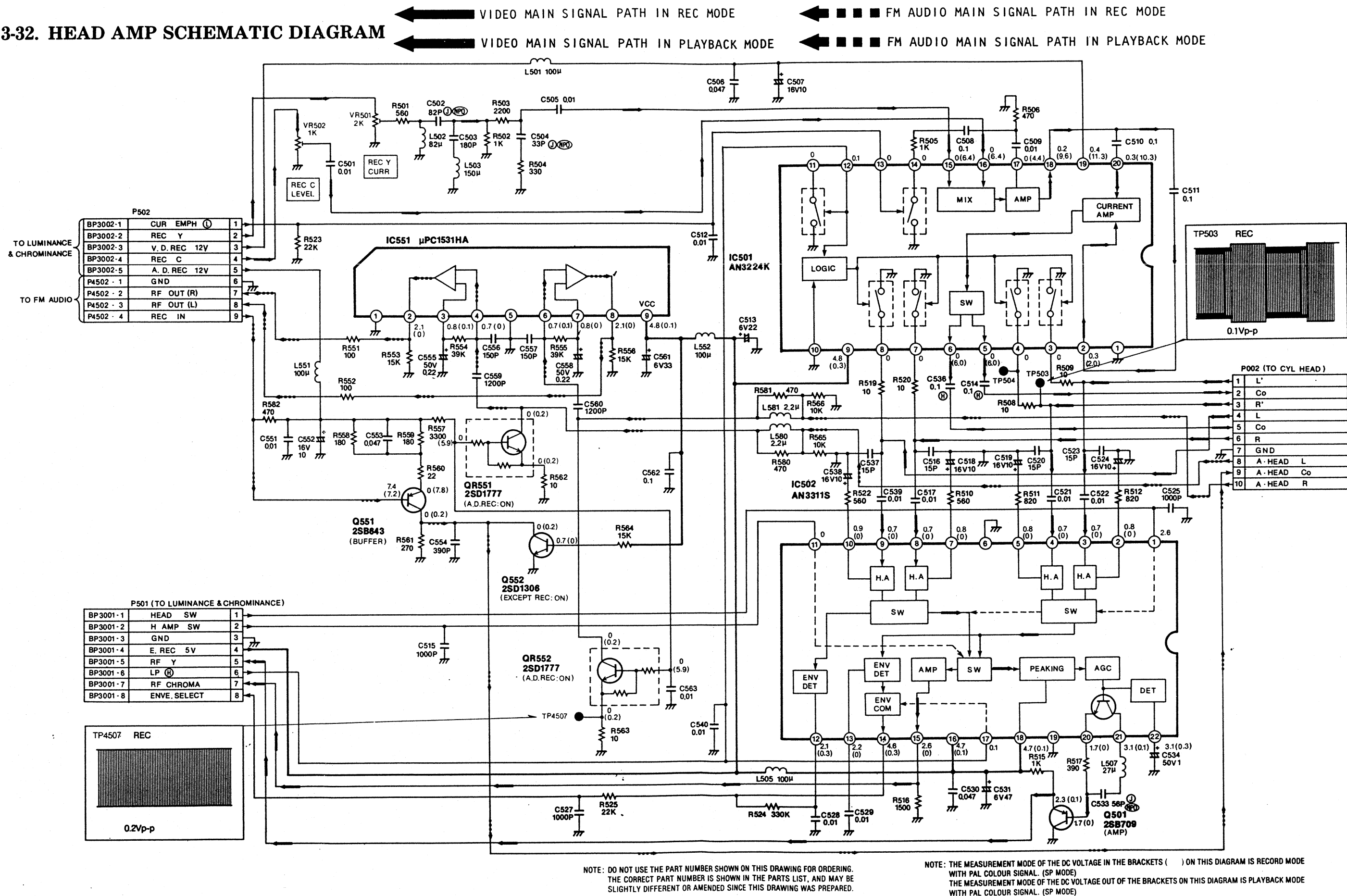
3-30. SYNC GENERATOR C.B.A.
(VEP03485A: NV-D80EG/EV) (VEP03485B: NV-D80B)



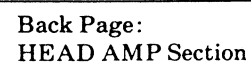
3-31. HEAD AMP C.B.A. (VEP05106C)



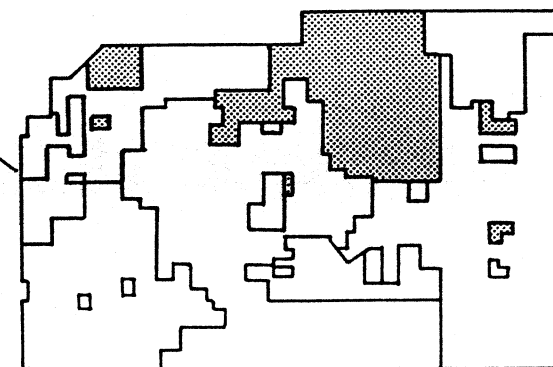
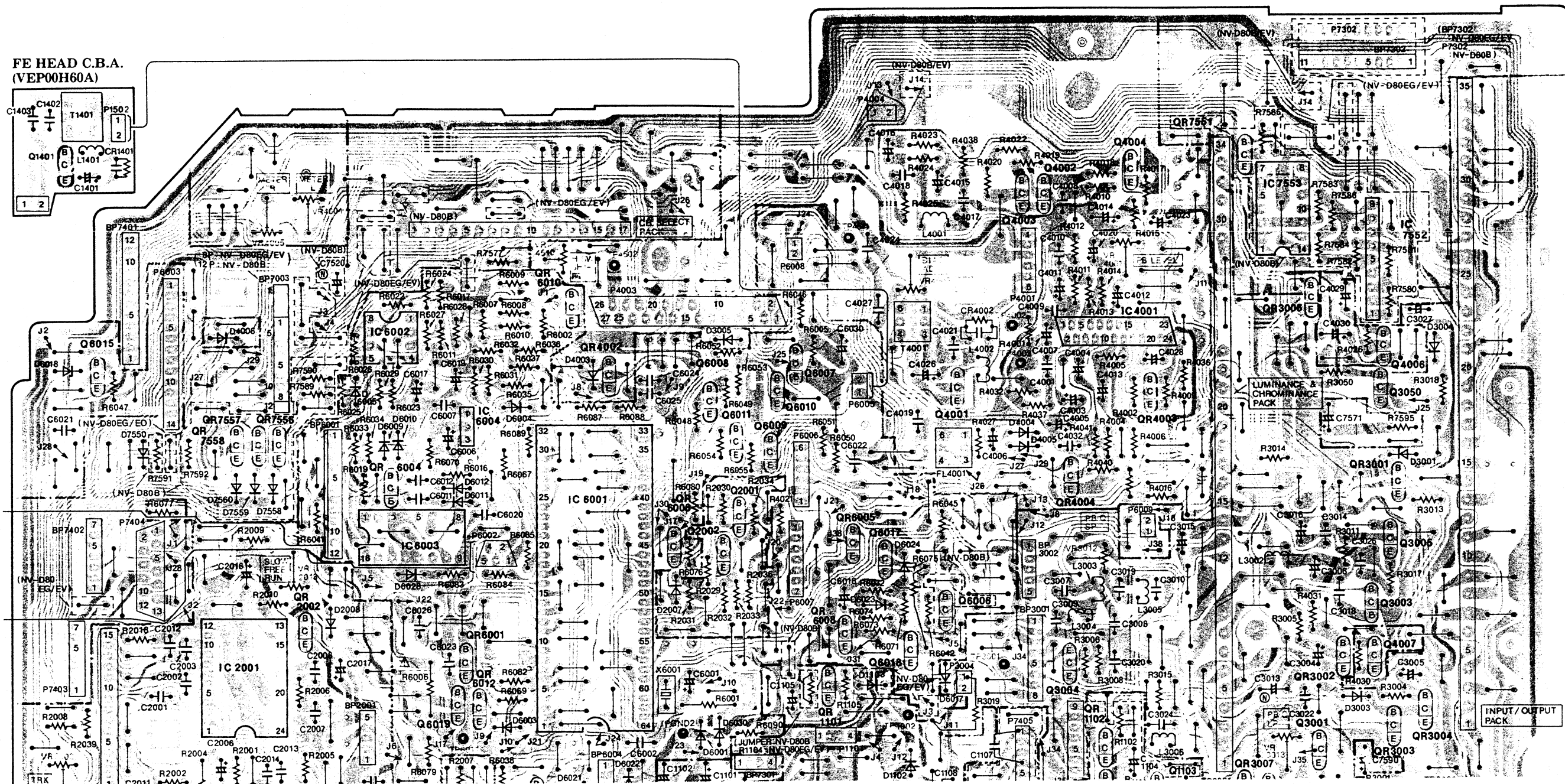
3-32. HEAD AMP SCHEMATIC DIAGRAM



← MAIN SIGNAL PATH IN REC MODE ← MAIN SIGNAL PATH IN PLAYBACK MODE

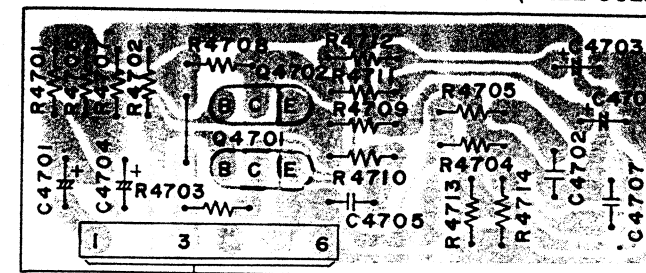


3-34. AUDIO Section In Main C.B.A. (VEP03410A: NV-D80EG) (VEP03410C: NV-D80B) (VEP03410B: NV-D80EV)

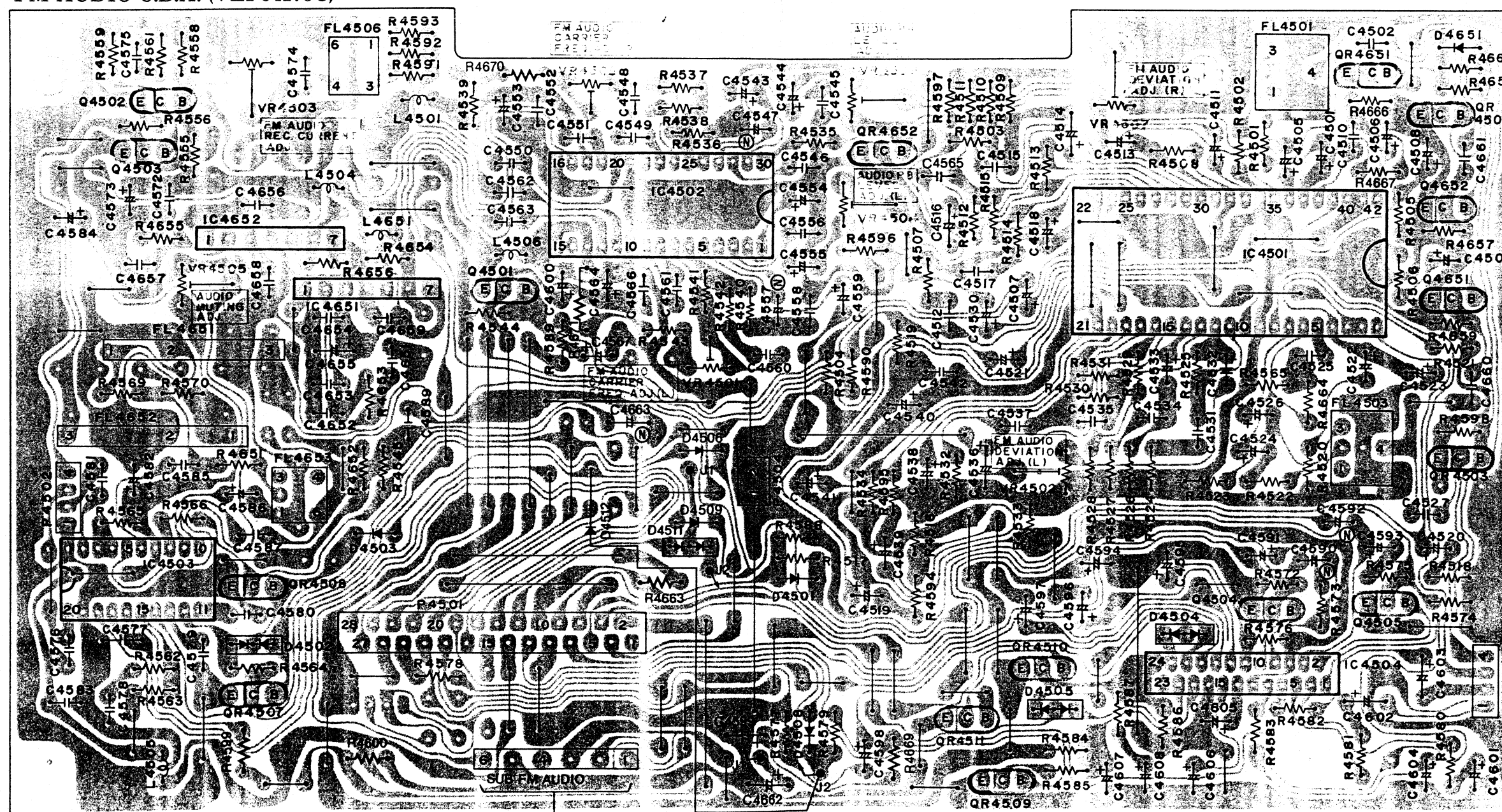


3-35. FM AUDIO C.B.A. (VEP04179C)

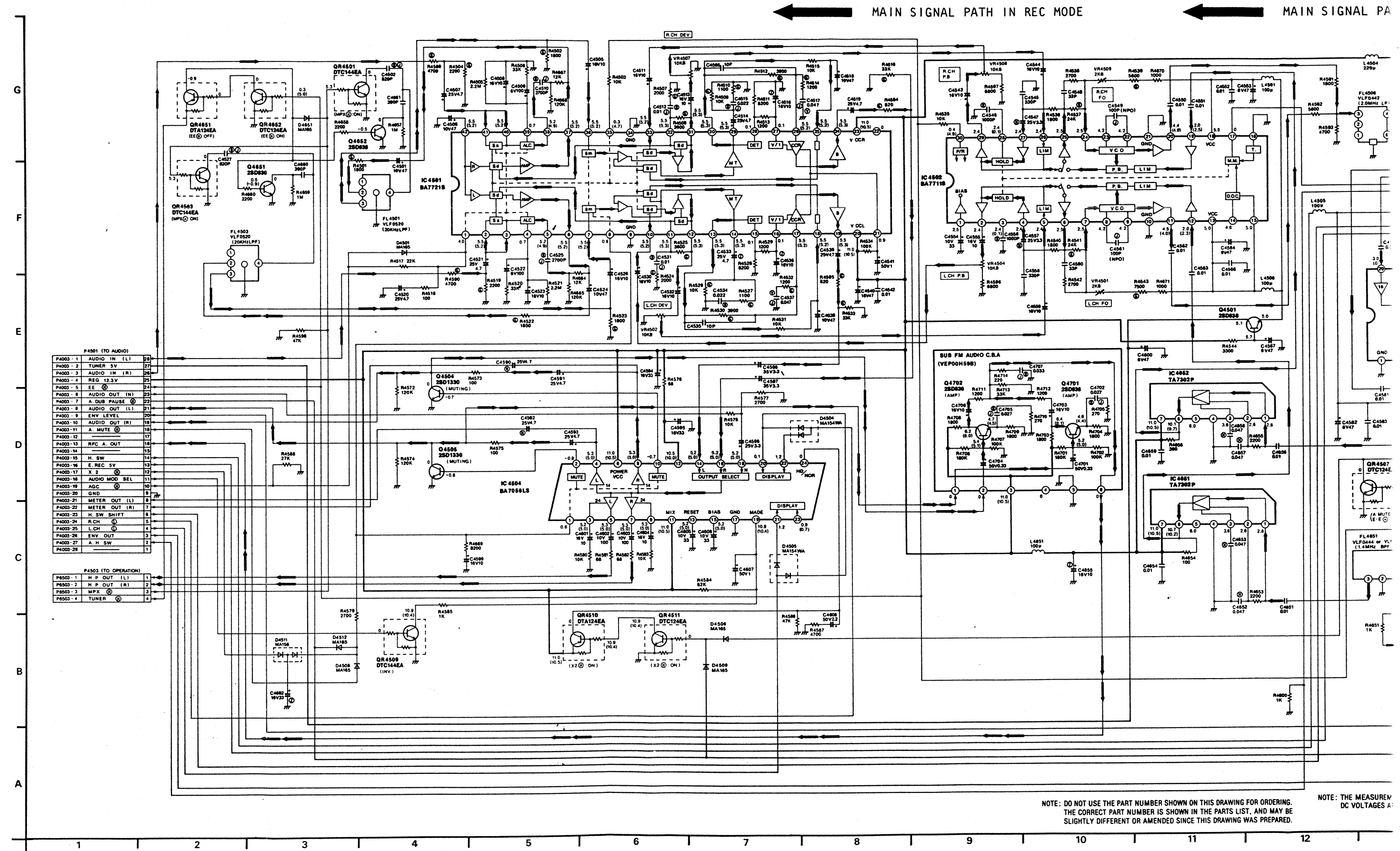
SUB FM AUDIO PACK C.B.A. (VEP00H59B)



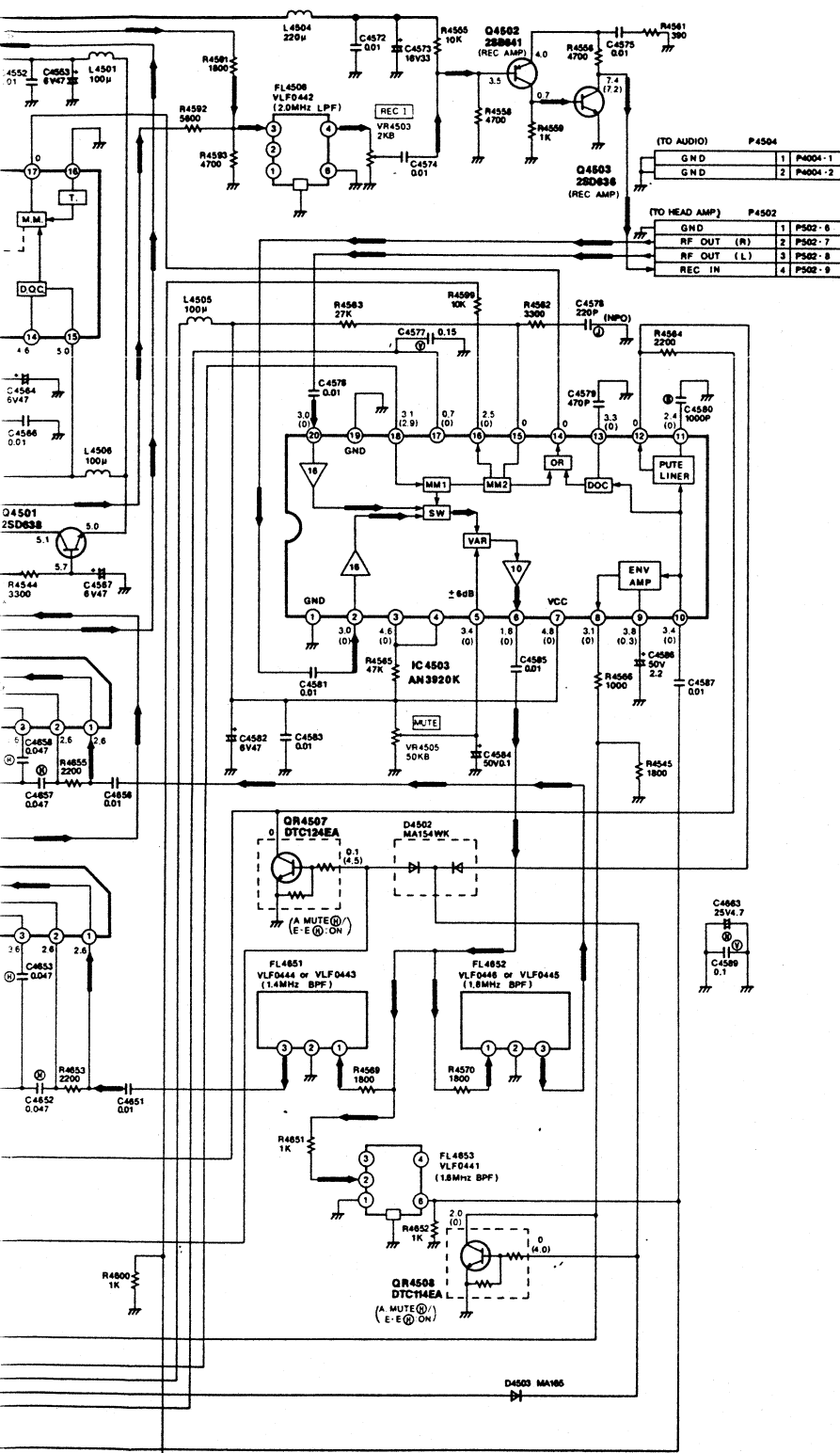
FM AUDIO C.B.A. (VEP04179C)



3-36. FM AUDIO SCHEMATIC DIAGRAM



MAIN SIGNAL PATH IN PLAYBACK MODE



DRAWING FOR ORDERING.
PARTS LIST, AND MAY BE
DRAWING WAS PREPARED.

NOTE: THE MEASUREMENT MODE OF THE
DC VOLTAGES ARE FOLLOWING CONDITION

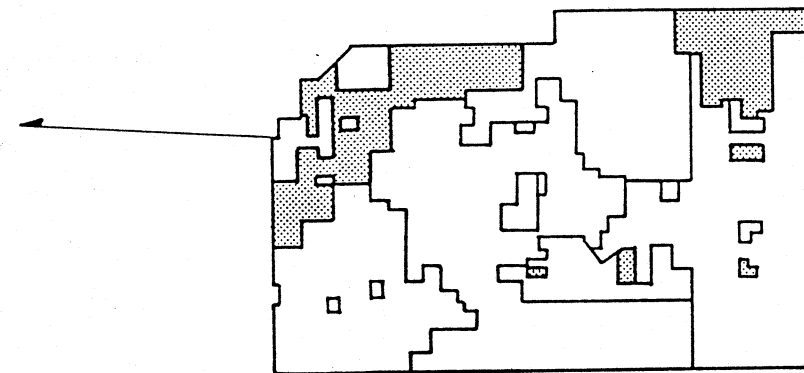
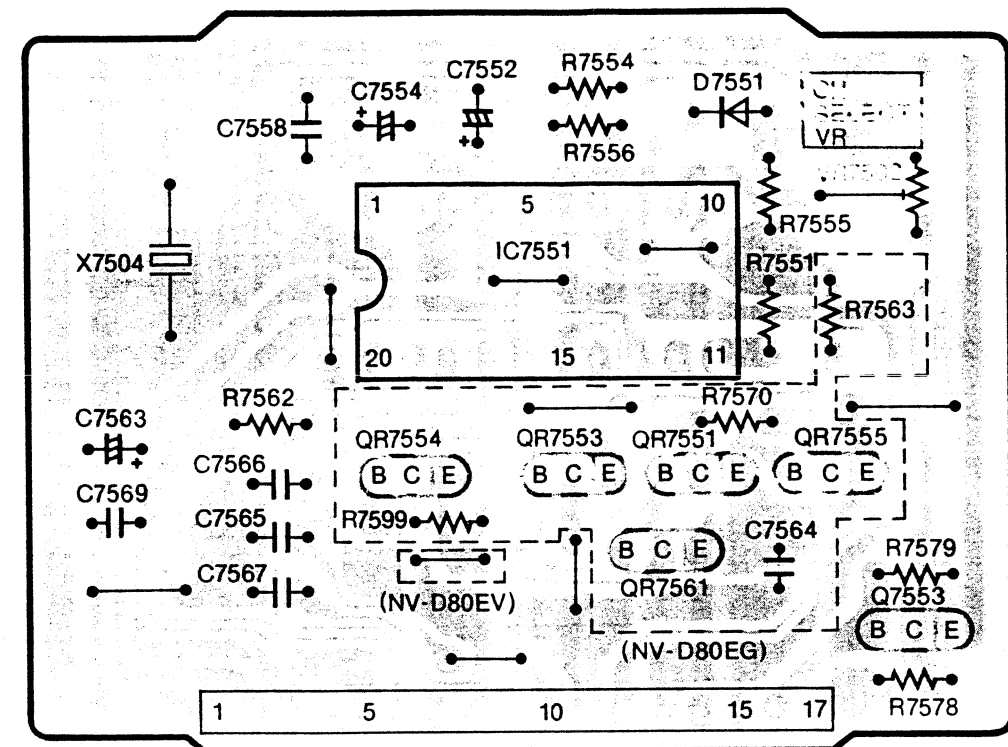
- AUDIO IN SIGNAL LEVEL...—10dB 1kHz
- LEVEL VOLUME...CENTER POSITION
- MEASUREMENT MODE REC...BRACKETS ()
 PLAY...WITHOUT BRACKETS

3-38. CH SELECT PACK C.B.A.

(VEP07410A: NV-D80EG) (VEP07410B: NV-D80EV)

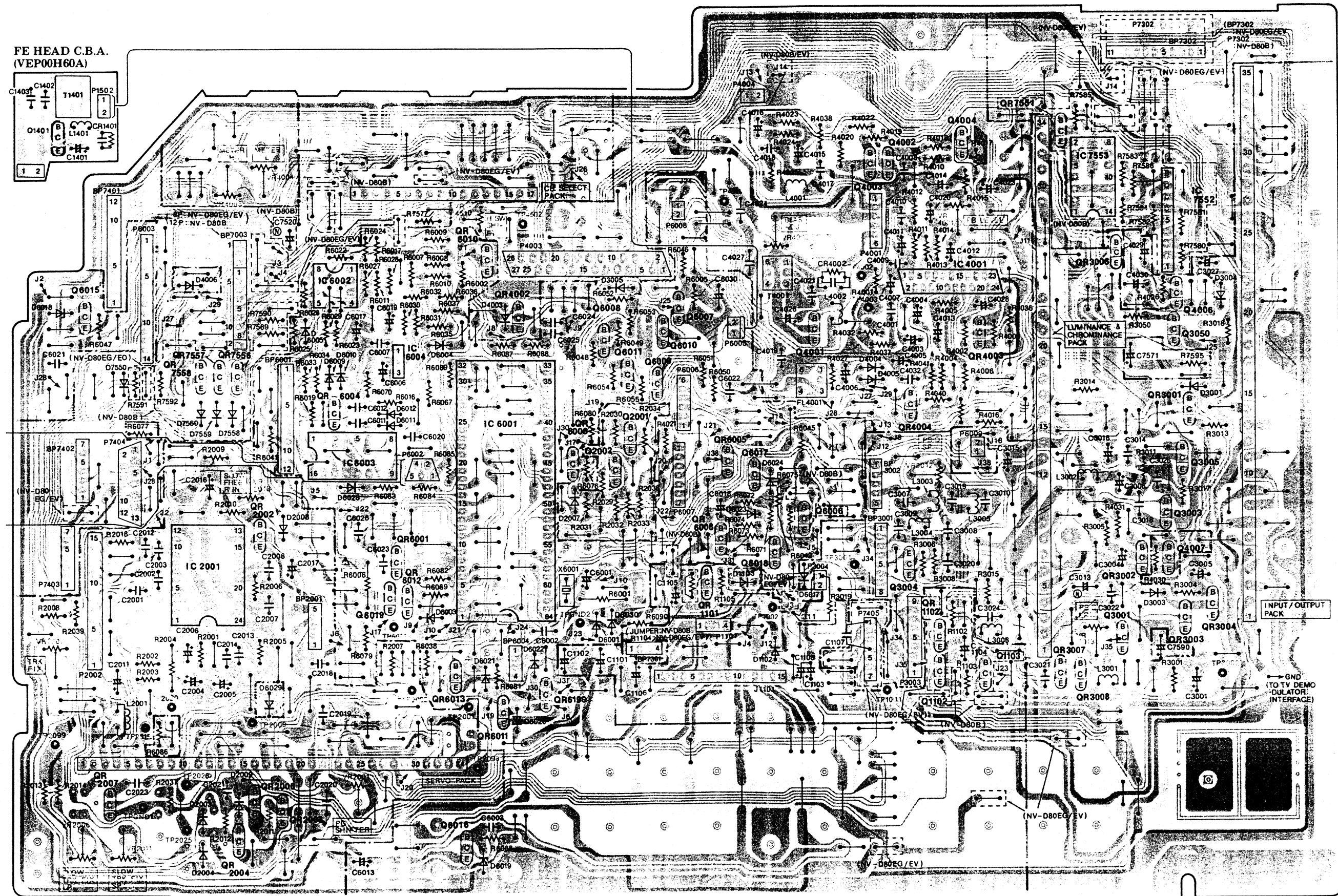
FM AUDIO SCHEMATIC		
Transistor		
Q4501		E-11
Q4502		G-13
Q4503		G-14
Q4504		E-4
Q4505		D-4
Q4651		F-3
Q4652		G-3
Q4701		D-10
Q4702		D-9
Transistor & Resistor		
QR4501		G-3
QR4503		F-2
QR4507		D-13
QR4508		B-13
QR4509		B-4
QR4510		B-6
QR4511		B-6
QR4651		G-2
QR4652		G-3
Integrated Circuit		
IC4501		F-4
IC4502		F-9
IC4503		D-13
IC4504		D-5
IC4651		D-11
IC4652		E-11
Adjustment		
VR4501		E-10
VR4502		E-6
VR4503		G-13
VR4504		F-9
VR4505		D-13
VR4507		G-6
VR4508		G-9
VR4509		G-10
Connector		
P4501		E-1
P4502		F-15
P4503		C-1
P4504		G-15

ADDRESS INFORMATION

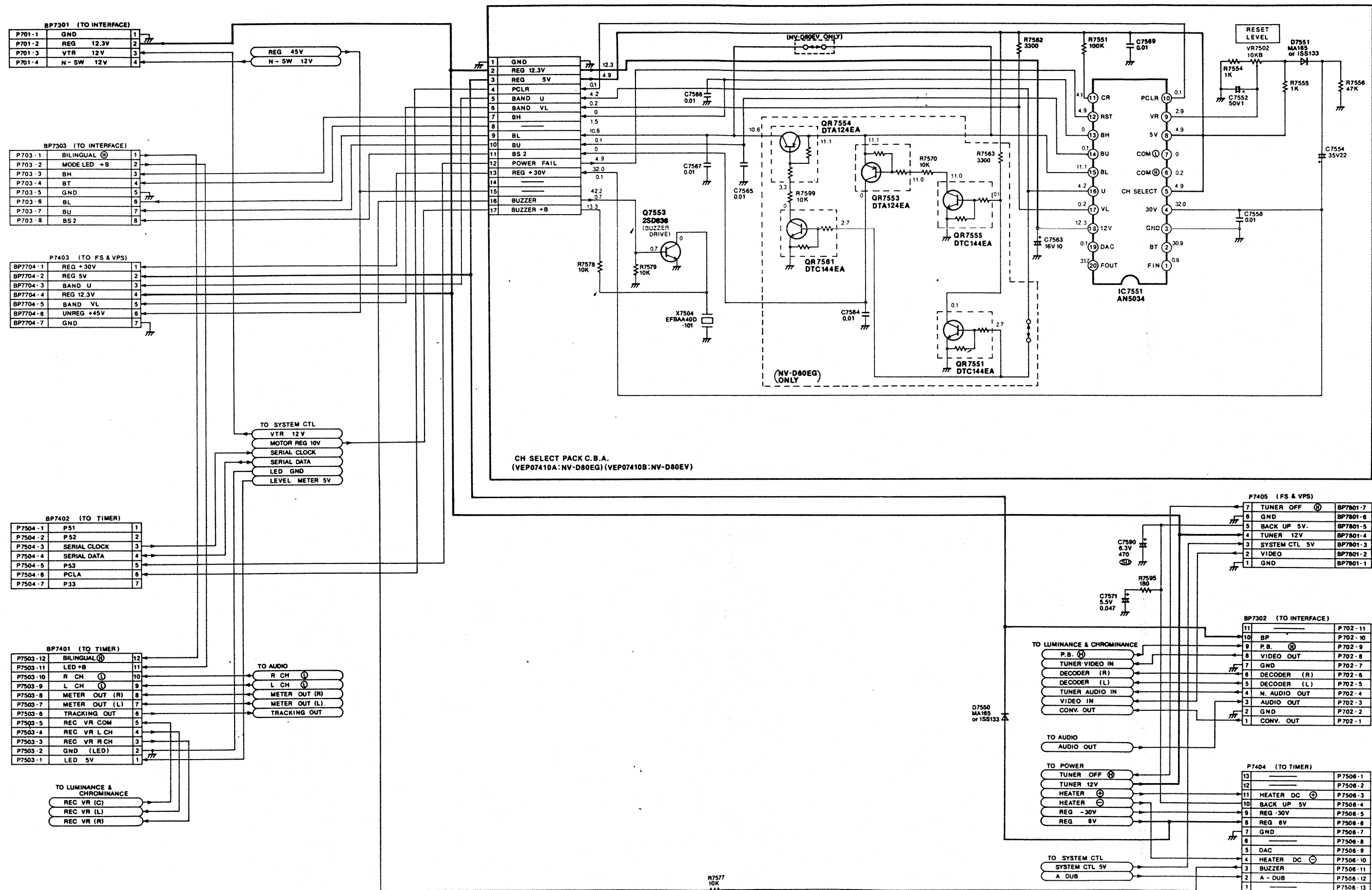


Next Page:
CH SELECT Section

3-37. CH SELECT Section In Main C.B.A. (VEP03410A: NV-D80EG) (VEP03410B: NV-D80EV)



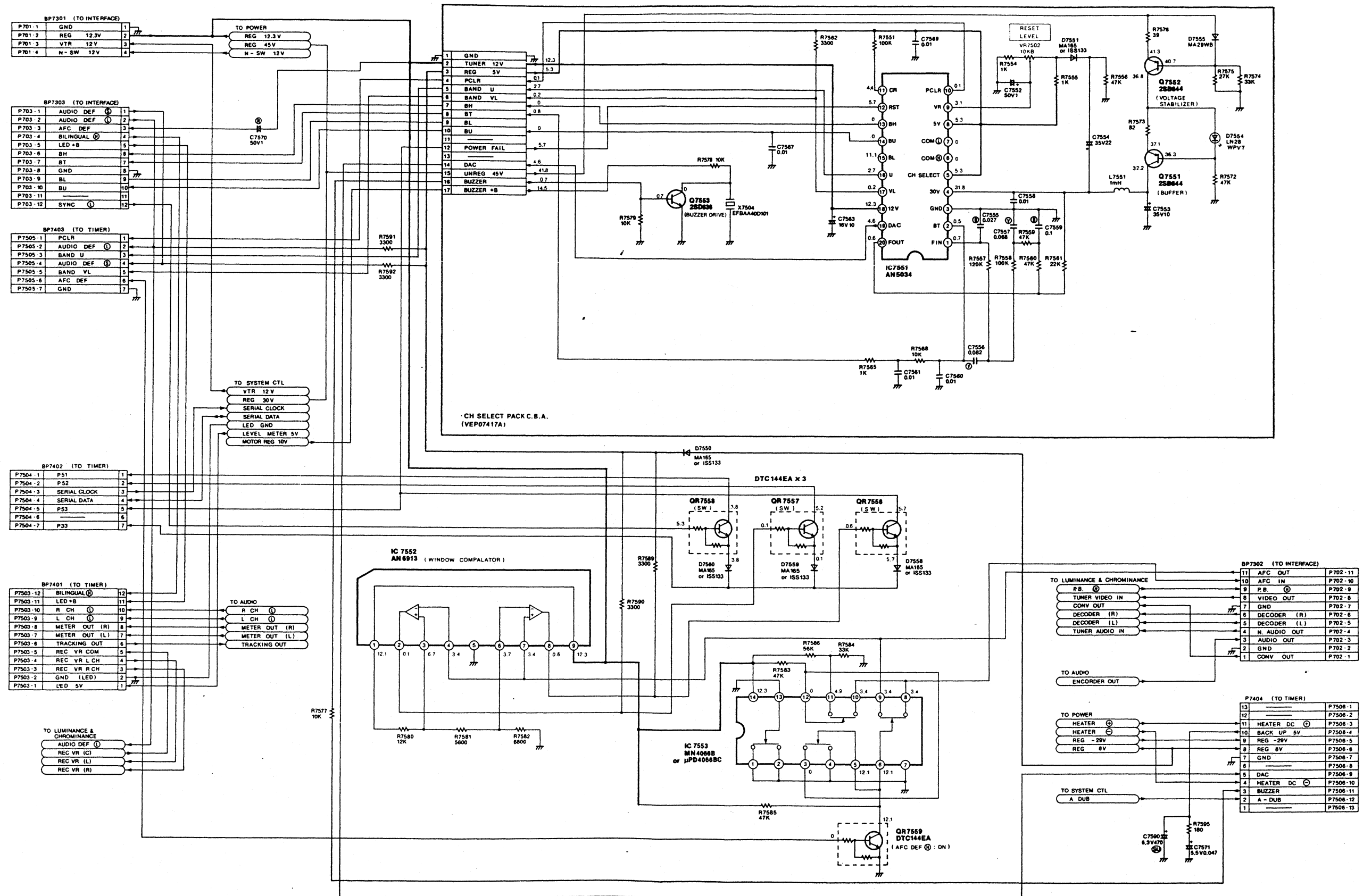
3-39. CH SELECT SCHEMATIC DIAGRAM (NV-D80EG/EV)



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

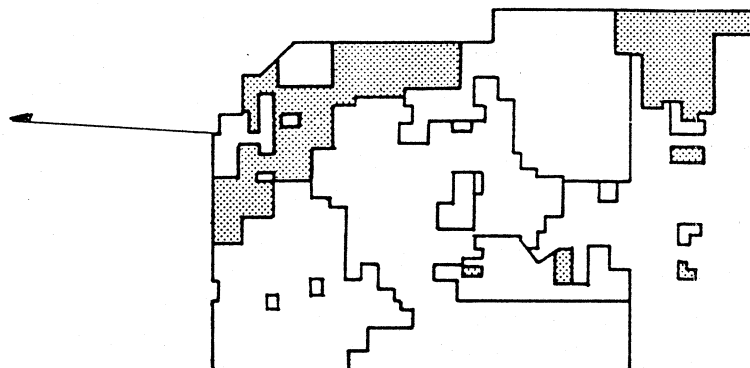
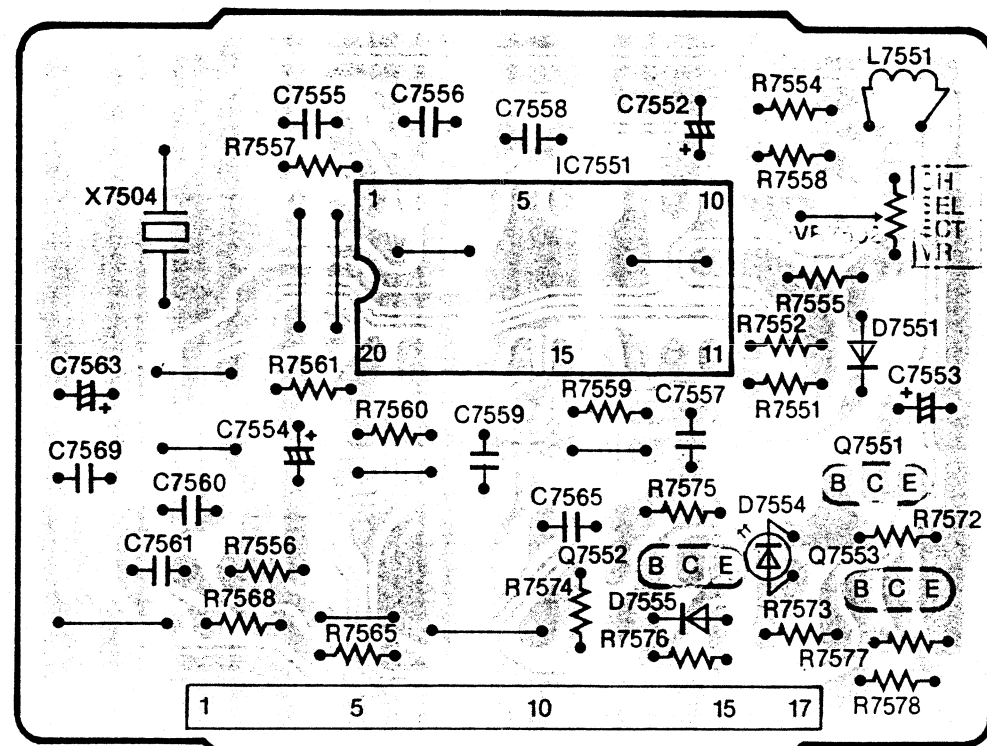
3-40. CH SELECT SCHEMATIC DIAGRAM (NV-D80B)



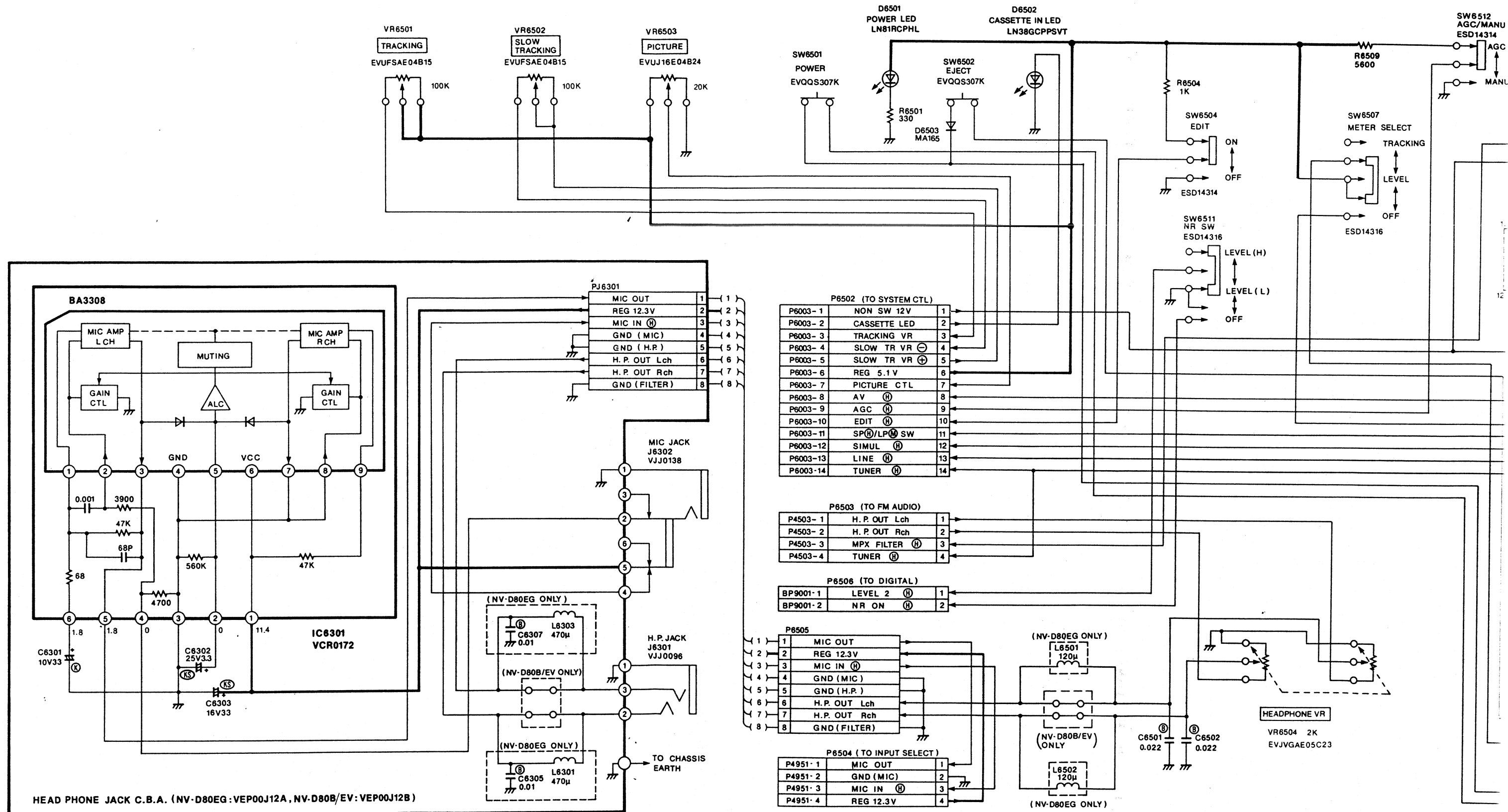
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

3-42. CH SELECT PACK C.B.A. (VEP07417A: NV-D80B)

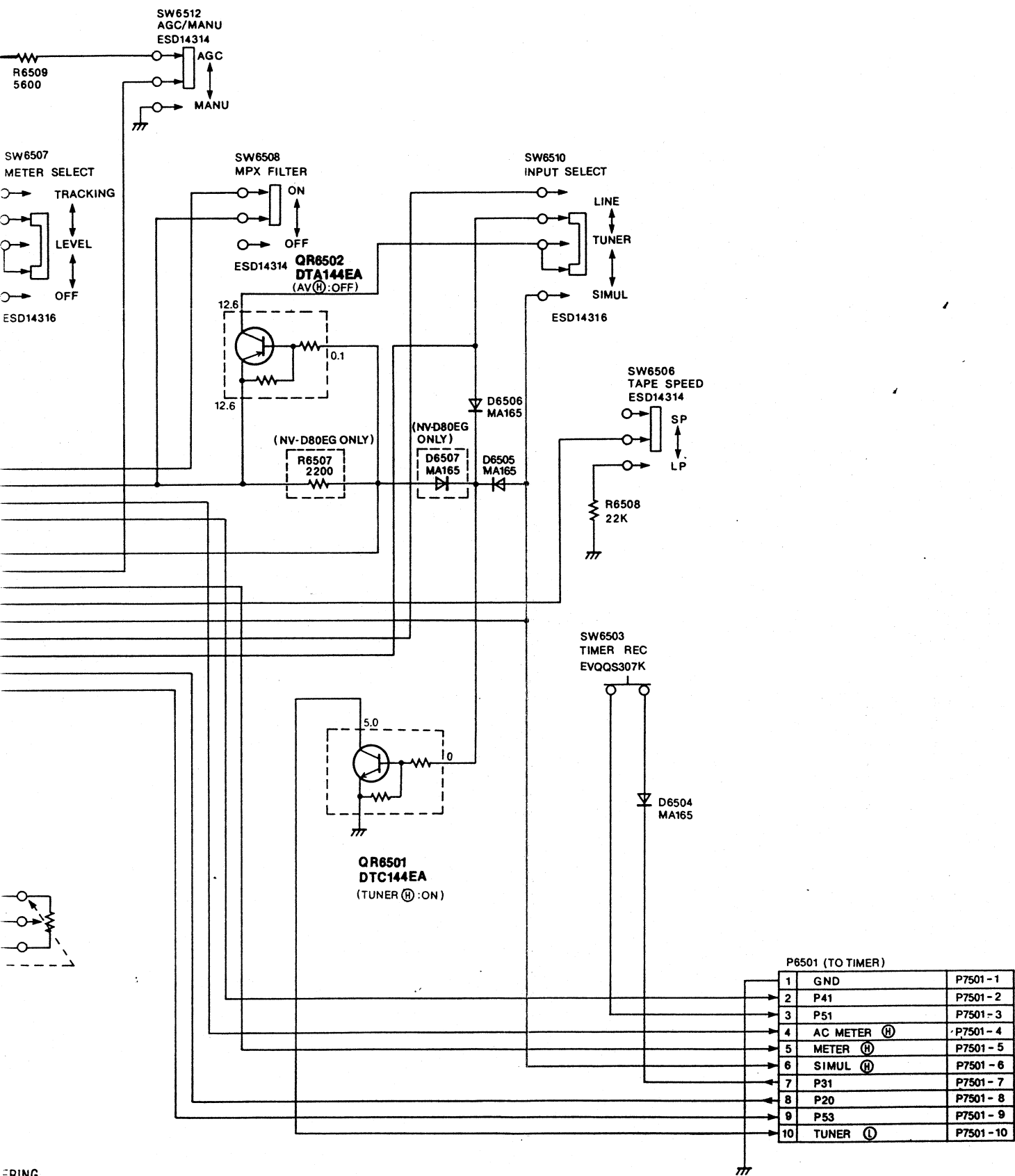


3-43. OPERATION SCHEMATIC DIAGRAM



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

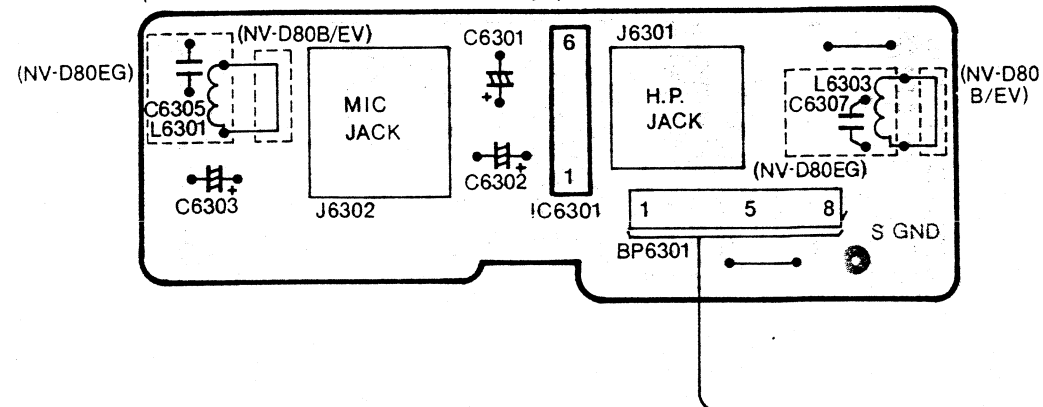
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.
THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE
SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.



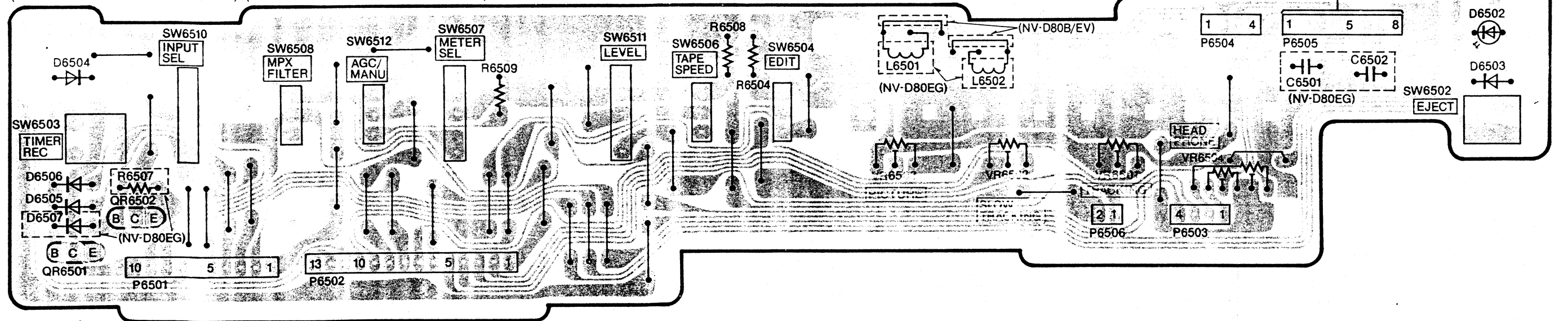
ERING.
MAY BE
PARED.

3-44. OPERATION C.B.A. (VEP06404A: NV-D80EG) (VEP06404B: NV-D80B/EV)

HEAD PHONE JACK C.B.A.
(VEP00J12A: NV-D80EG) (VEP00J12B: NV-D80B/EV)

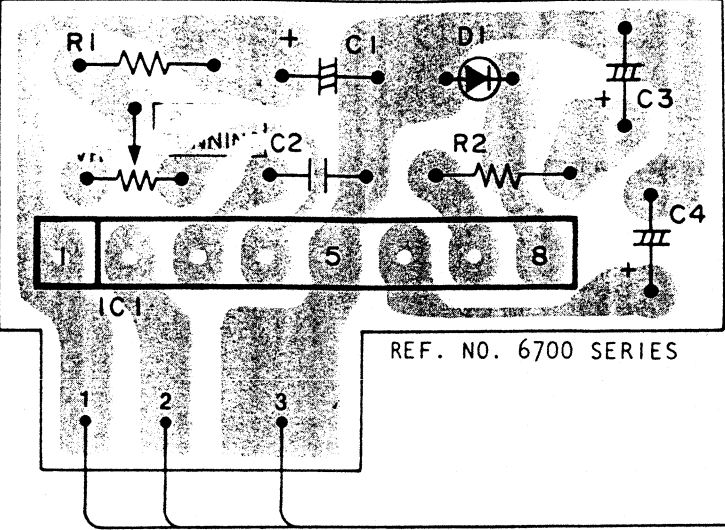


OPERATION C.B.A.
(VEP06404A: NV-D80EG) (VEP06404B: NV-D80B/EV)

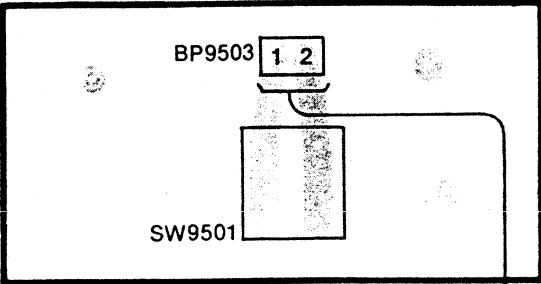


3-45. TIMER C.B.A. (VEP07411A: NV-D80EG/EV) (VEP07411C: NV-D80B)

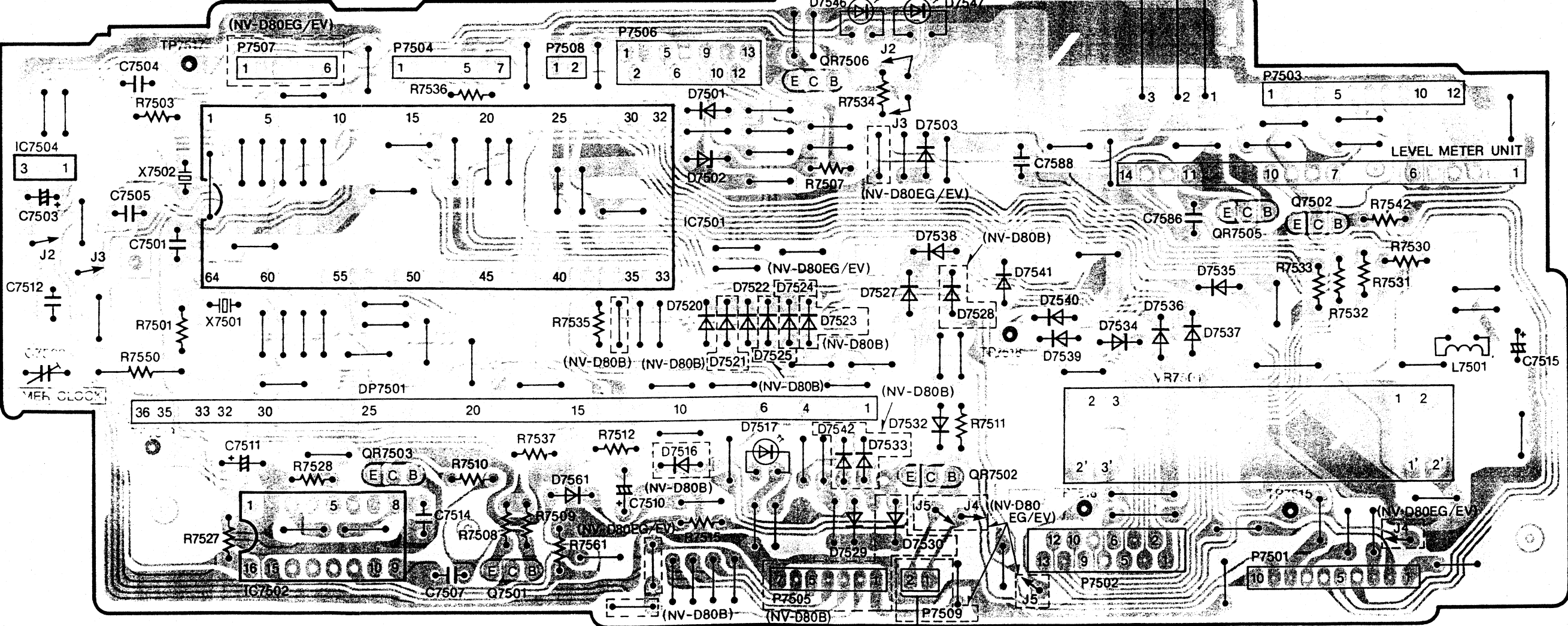
IR RECEIVER C.B.A. (VEP06380B)



ELECTRONIC LOCK
RELEASED SW C.B.A.
(VEK3441: NV-D80EG/EV)

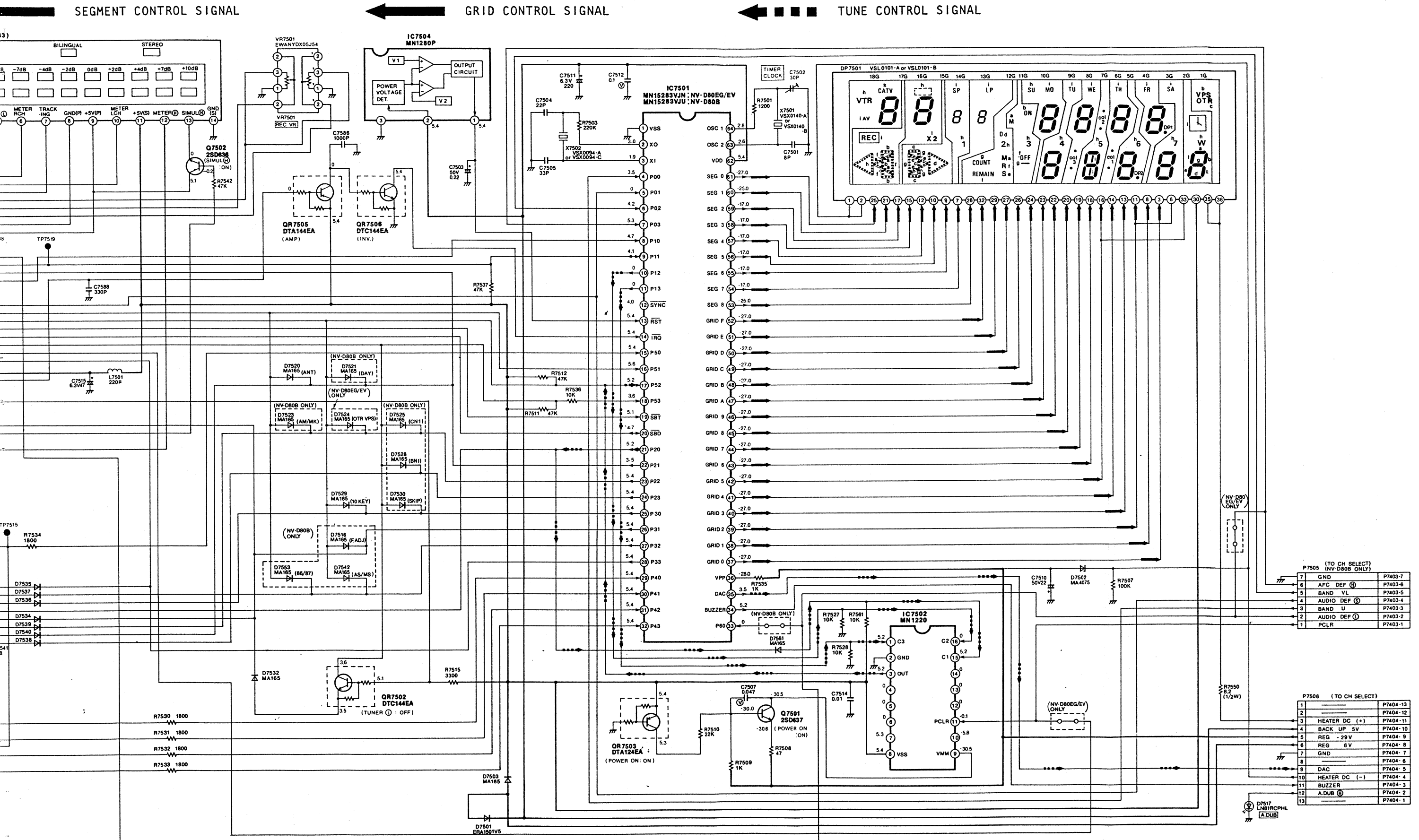


TIMER C.B.A.
(VEP07411A: NV-D80EG/EV) (VEP07411C: NV-D80B)

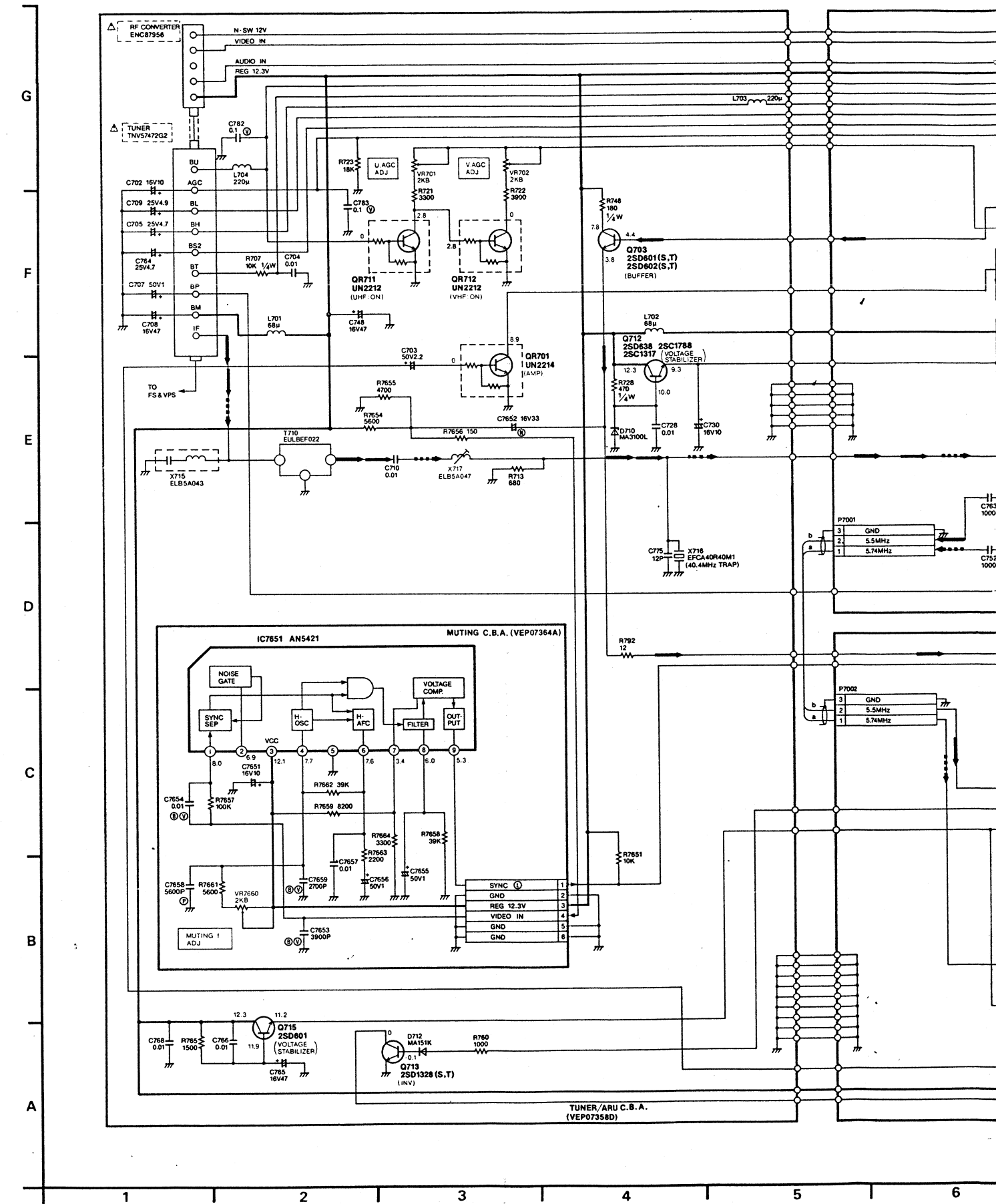


← SEGMENT CC

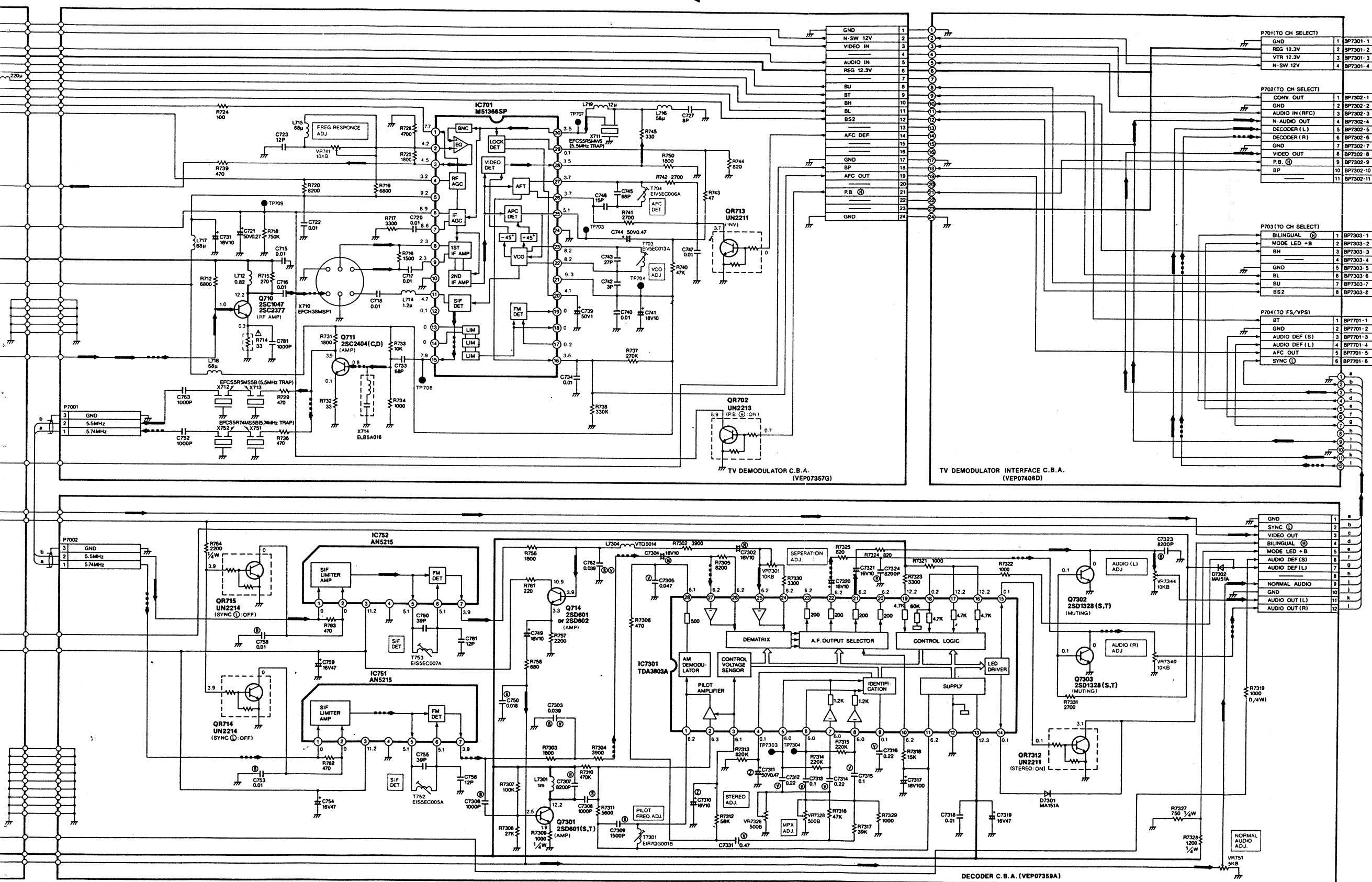




3-47. TV DEMODULATOR SCHEMATIC DIAGRAM (NV-D80EG)



VIDEO SIGNAL PATH ← AUDIO MAIN SIGNAL PATH ← ■ ■ ■ AUDIO SUB SIGNAL PATH



TV DEMODULATOR SCHEMATIC (NV-D80EG)

Transistor

Q703	F-4
Q710	E-7
Q711	E-8
Q712	F-4
Q713	A-3
Q714	C-9
Q715	A-2
Q7301	A-9
Q7302	C-13
Q7303	B-13

Transistor & Resistor

QR701	E-3
QR702	E-11
QR711	F-3
QR712	F-3
QR713	F-10
QR714	B-7
QR715	C-7
QR7312	B-13

Integrated Circuit

IC701	G-9
IC751	B-8
IC752	C-8
IC7301	C-10
IC7651	D-2

Test Point

TP703	F-9
TP707	G-9
TP709	F-7
TP7303	B-11
TP7304	B-11

Adjustment

VR701	G-3
VR702	G-3
VR741	F-7
VR751	A-14
VR7301	C-11
VR7326	A-11
VR7328	A-11
VR7340	C-14
VR7344	C-14
VR7660	B-2
T703	F-10
T704	F-10
T752	B-8
T753	C-8
T7301	A-10
X717	E-3

Connector

P701	G-15
P702	G-15
P703	F-15
P704	E-15
P7001	D-5
P7002	C-5

ADDRESS INFORMATION

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

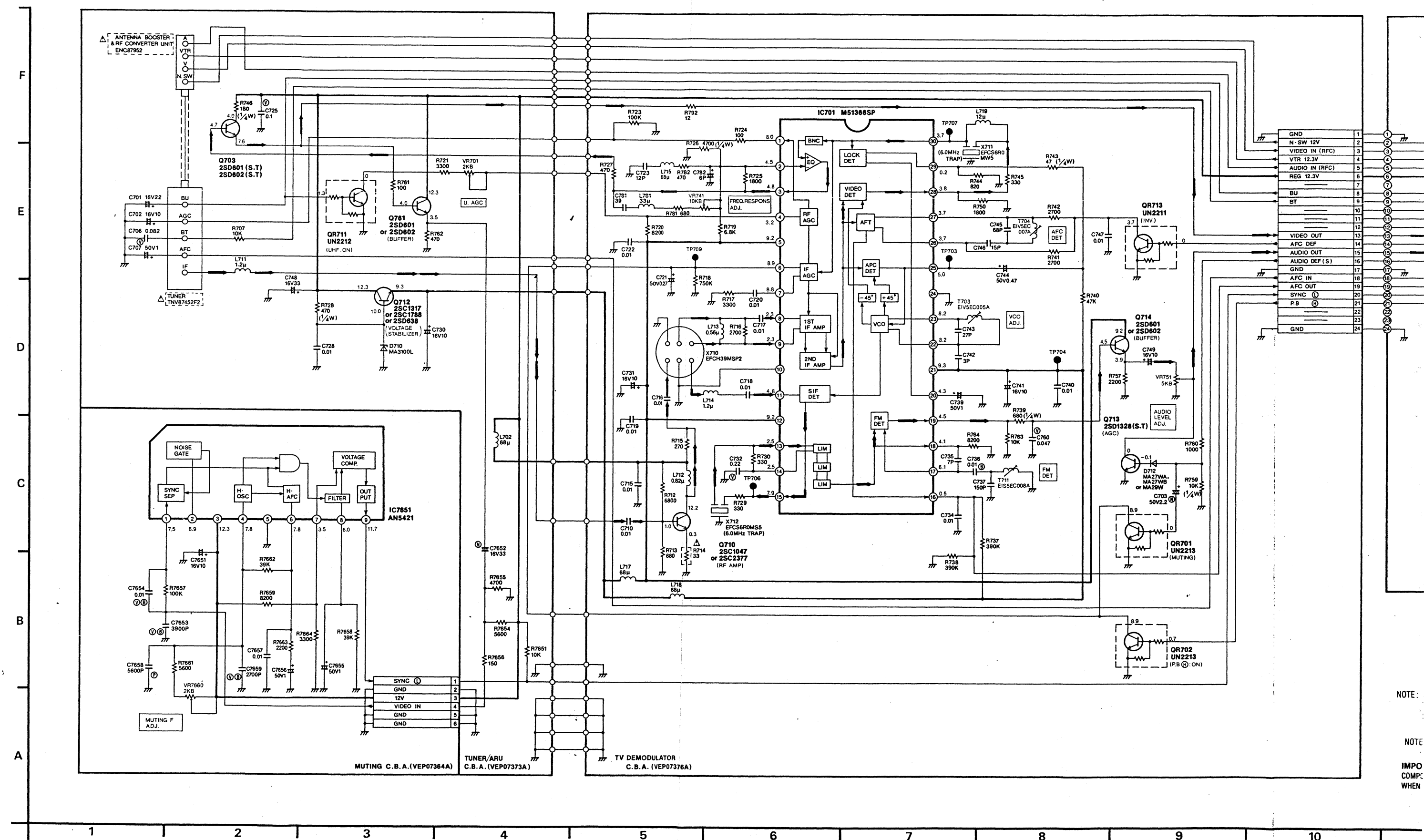
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

IMPORTANT SAFETY NOTICE: COMPONENTS IDENTIFIED WITH THE MARK  HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

3-49. TV DEMODULATOR SCHEMATIC DIAGRAM (NV-D80B)

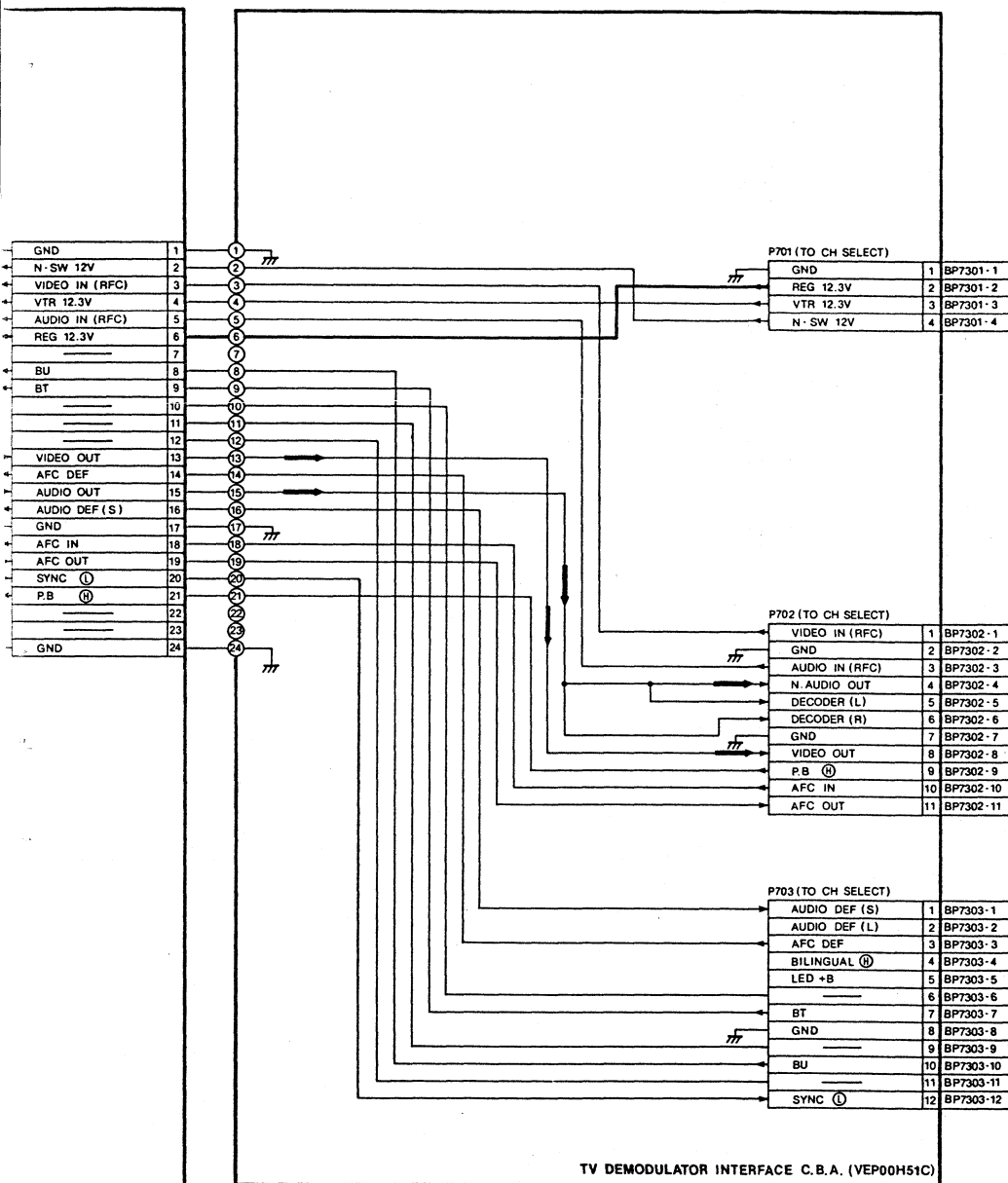
VIDEO SIGNAL PATH

AUDIO SIGNAL PATH



NOTE:
NOTE:
IMPO
COMP
WHEN

PATH



TV DEMODULATOR SCHEMATIC (NV-D80B)	
Transistor	
Q703	E-2
Q710	C-6
Q712	D-3
Q713	C-9
Q714	D-9
Q761	E-3
Transistor & Resistor	
QR701	C-9
QR702	B-9
QR711	E-3
QR713	E-9
Integrated Circuit	
IC701	F-6
IC7651	C-3
Test Point	
TP703	E-7
TP706	C-6
TP707	F-7
TP709	E-5
Adjustment	
VR701	E-4
VR741	E-5
VR751	D-9
VR7660	A-2
T703	D-7
T704	E-8
T711	C-8
Connector	
P701	F-13
P702	D-13
P703	C-13

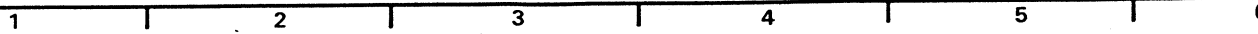
ADDRESS INFORMATION

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.
THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE
SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

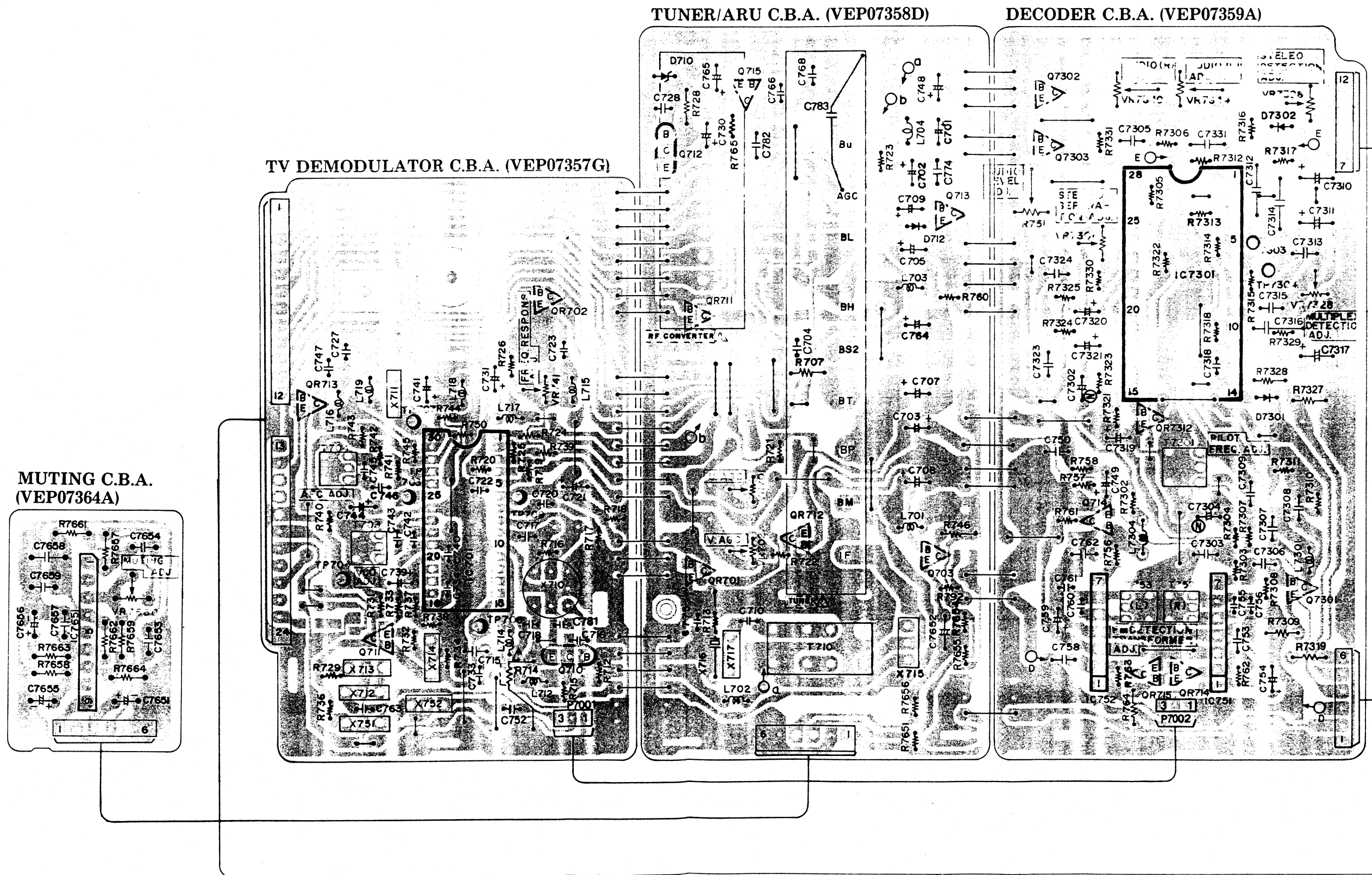
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK Δ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

— G —
— F —
— E —
— D —
— C —
— E —
— A —

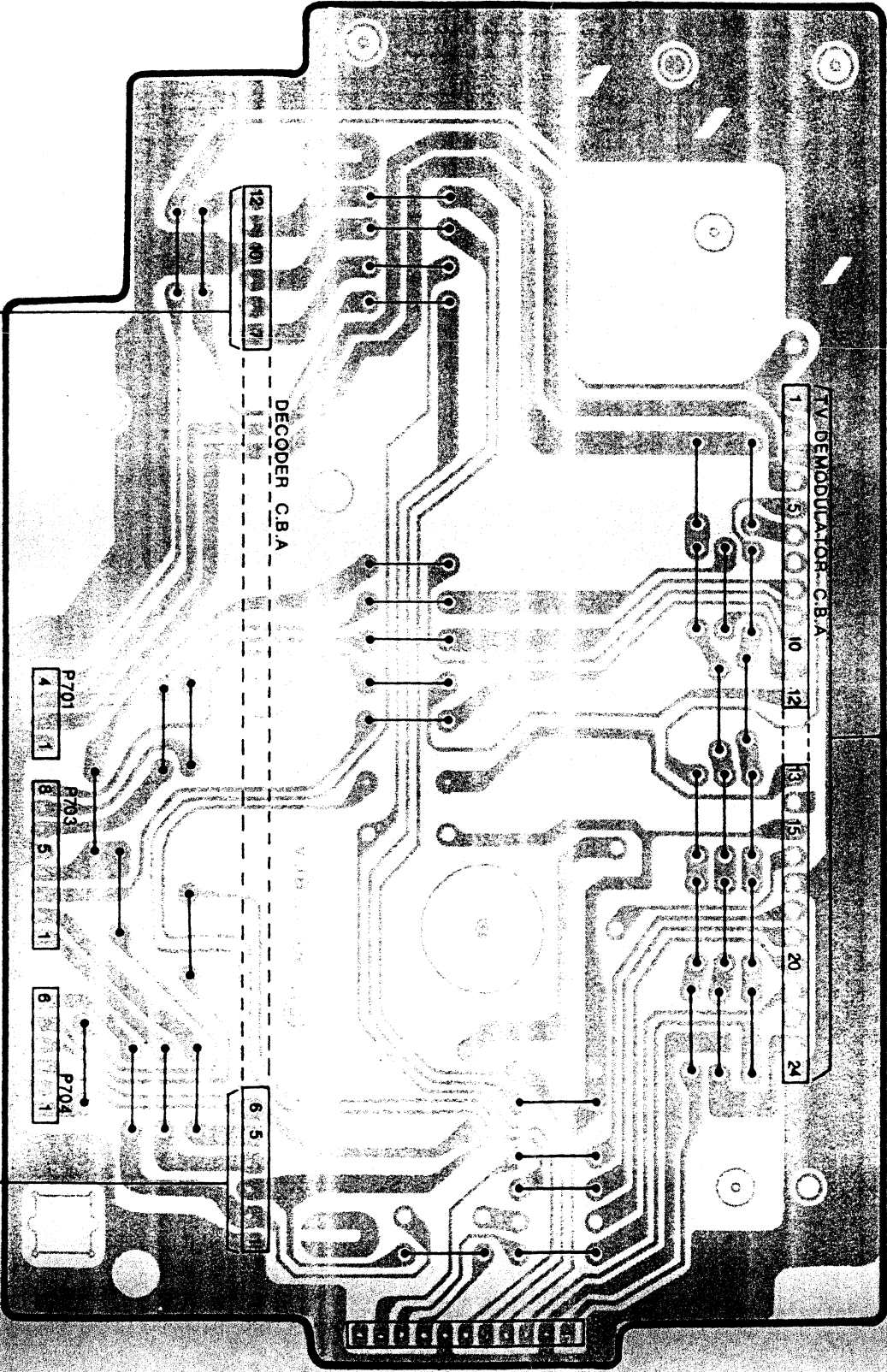


3-48. TV DEMODULATOR INTERFACE C.B.A. (VEP07406D: NV-D80EG), TV DEMODULATOR C.B.A. (VEP07357G: NV-D80EG) & TUNER/ARU



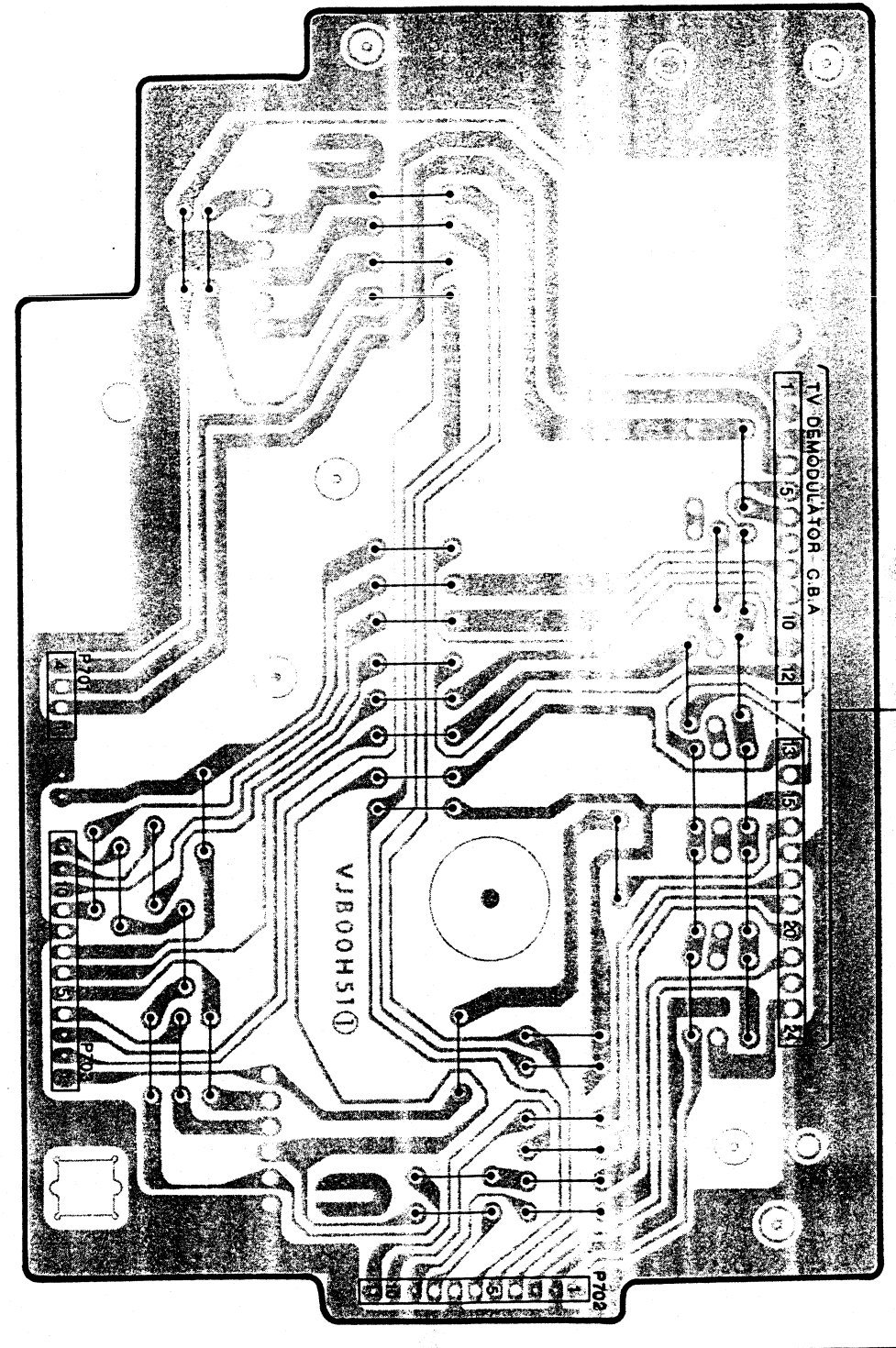
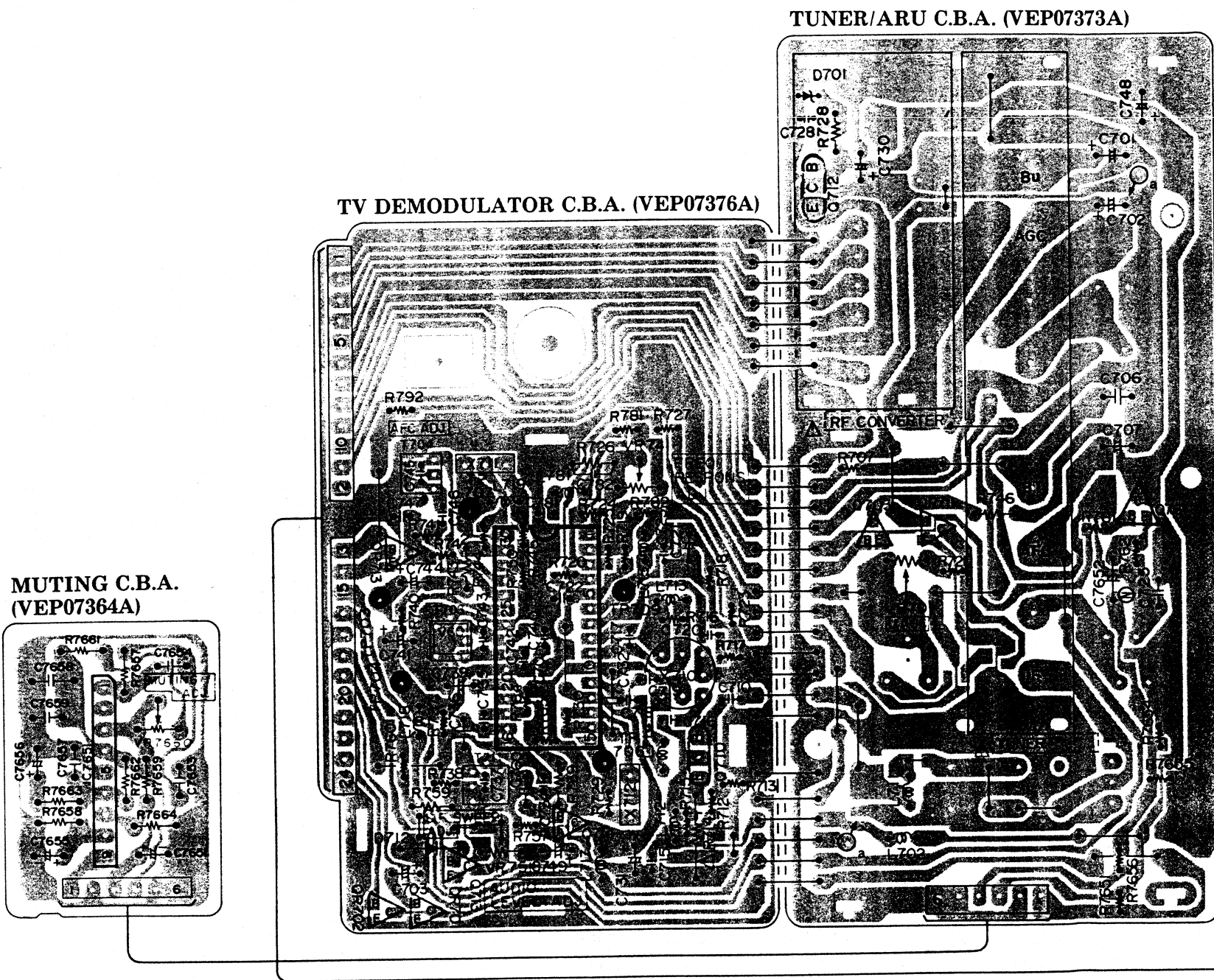
C.B.A. (VEP07358D: NV-D80EG)

TV DEMODULATOR INTERFACE C.B.A. (VEP07406D)

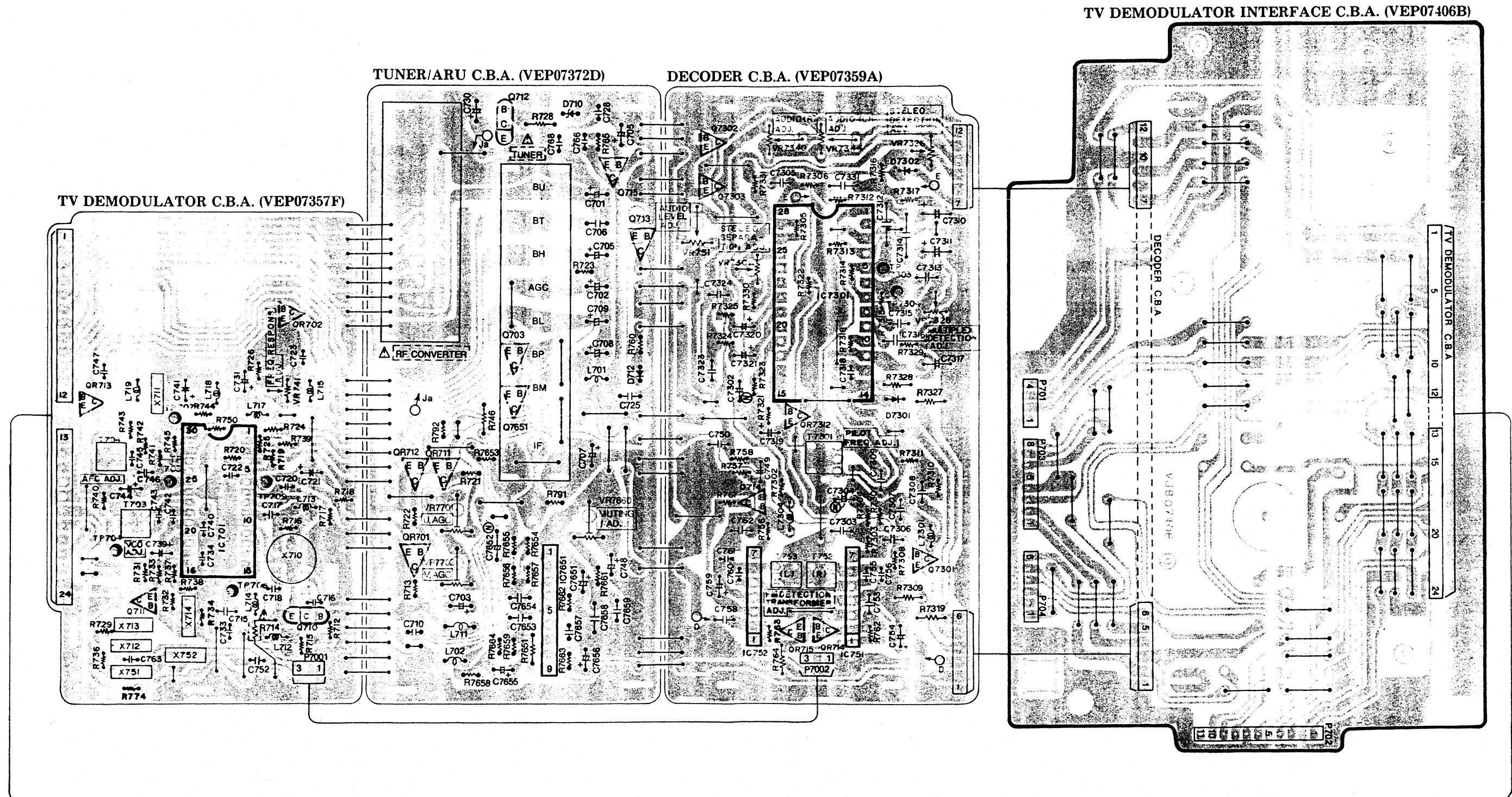


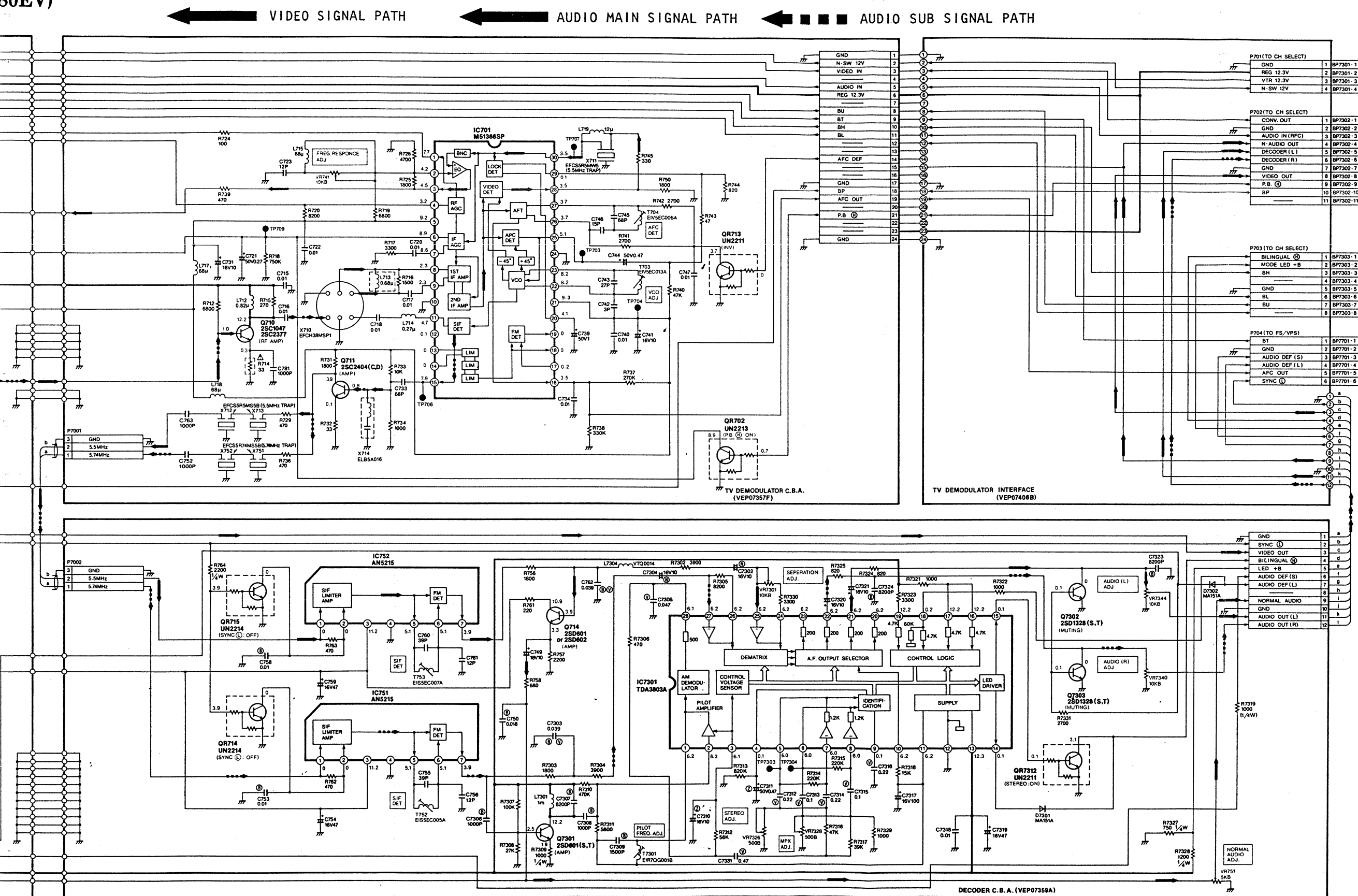
**3-50. TV DEMODULATOR INTERFACE C.B.A. (VEP00H51C: NV-D80B), TV DEMODULATOR C.B.A. (VEP07376A: NV-D80B)
& TUNER/ARU C.B.A. (VEP07373A: NV-D80B)**

TV DEMODULATOR INTERFACE C.B.A. (VEP00H51C)



3-51. TV DEMODULATOR INTERFACE C.B.A. (VEP07406B: NV-D80EV), TV DEMODULATOR C.B.A. (VEP07357F: NV-D80EV)
& TUNER/ARU C.B.A. (VEP07372D: NV-D80EV)





TV DEMODULATOR SCHEMATIC (NV-D80EV)

Transistor	
Q703	F-4
Q710	E-8
Q711	E-8
Q712	F-4
Q713	A-3
Q714	C-9
Q715	A-2
Q7301	A-9
Q7302	C-13
Q7303	B-13
Transistor & Resistor	
QR701	E-3
QR702	E-11
QR711	F-3
QR712	F-3
QR713	F-10
QR714	B-7
QR715	C-7
QR7312	B-13
Integrated Circuit	
IC701	G-9
IC751	B-8
IC752	C-8
IC7301	C-10
IC7651	D-2
Test Point	
TP703	F-9
TP707	G-9
TP709	F-7
TP7303	B-11
TP7304	B-11
Adjustment	
VR701	G-3
VR702	G-3
VR741	F-7
VR751	A-14
VR7301	C-11
VR7328	A-11
VR7328	A-11
VR7340	C-14
VR7344	C-14
VR7660	B-2
T703	F-10
T704	F-10
T752	B-8
T753	C-8
T7301	A-10
X717	E-3
Connector	
P701	G-15
P702	G-15
P703	F-15
P704	E-15
P7001	D-5
P7002	C-5

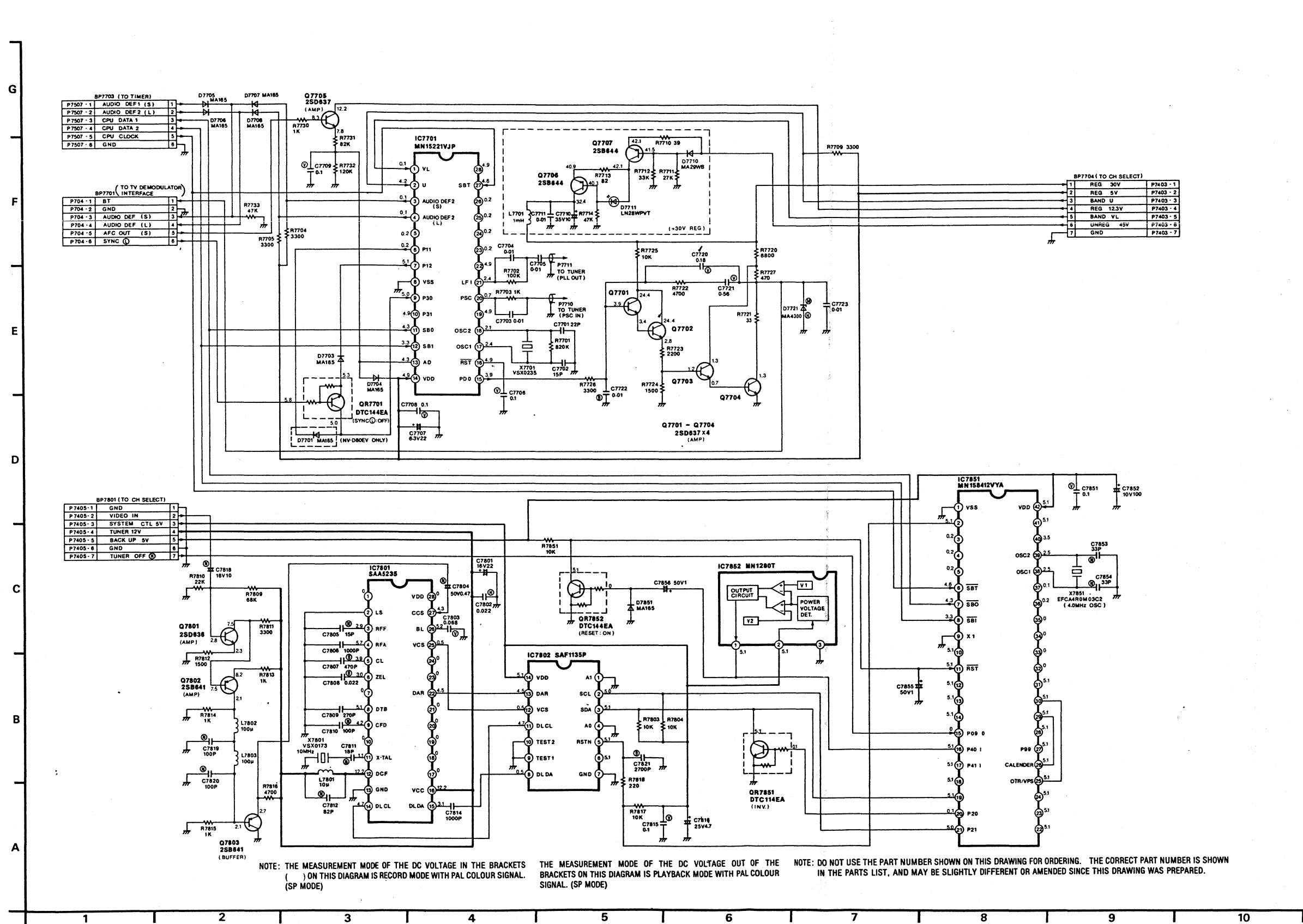
ADDRESS INFORMATION

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

IMPORTANT SAFETY NOTICE: COMPONENTS IDENTIFIED WITH THE MARK  HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

3-53. FREQUENCY SYNTHESIZER TUNER & VPS SCHEMATIC DIAGRAM (NV-D80EG/EV)



FREQUENCY SYNTHESIZER
TUNER & VPS SCHEMATIC

Transistor

Q7701	E-5
Q7702	E-6
Q7703	E-6
Q7704	E-6
Q7705	G-3
Q7706	F-4
Q7707	F-5
Q7801	C-2
Q7802	B-2
Q7803	A-3

Transistor & Resistor

QR7701	D-3
QR7851	A-6
QR7852	C-5

Integrated Circuit

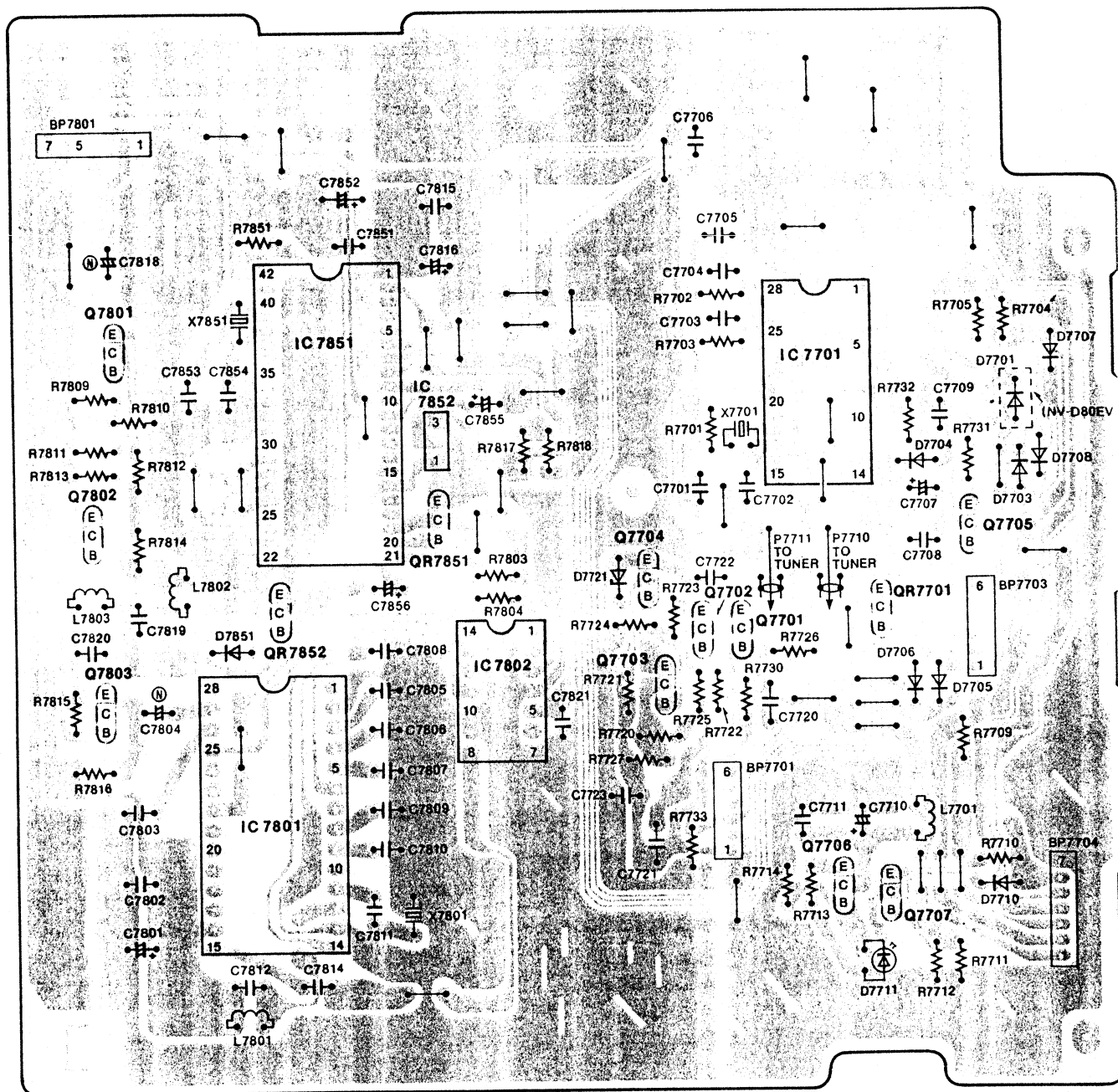
IC7701	F-4
IC7801	C-3
IC7802	B-5
IC7851	D-8
IC7852	C-6

Connector

BP7701	F-1
BP7703	G-1
BP7704	F-9
BP7801	D-1

ADDRESS INFORMATION

3-54. FREQUENCY SYNTHESIZER TUNER & VPS C.B.A. (VEP07381A: NV-D80EG) (VEP07381B: NV-D80EV)



MAIN Section

MAIN C.B.A. ADDRESS INFORMATION

POWER SUPPLY SECTION	
Transistor	
Q1102	B-8
Q1103	B-9
Transistor & Resistor	
QR1101	B-7
QR1102	B-8
Test Point	
TP1002	B-7
TP1003	B-8
Connector	
J1101	B-7
P1101	B-7

ADDRESS INFORMATION

SYSTEM CONTROL SECTION	
Transistor	
Q1401	E-3
Q1501	E-1
Q1502	D-2
Q6006	C-8
Q6007	D-7
Q6008	D-6
Q6009	D-7
Q6010	D-7
Q6011	D-6
Q6015	D-3
Q6016	A-5
Q6017	C-7
Q6018	C-7
Q6019	B-5
Transistor & Resistor	
QR6001	C-5
QR6004	C-5
QR6005	C-7
QR6006	C-6
QR6008	C-7
QR6010	D-6
QR6011	B-6
QR6012	B-5
QR6013	B-5
QR6199	B-6
Integrated Circuit	
IC1501	B-2
IC6001	C-6
IC6002	D-5
IC6003	C-5
IC6004	D-5
Test Point	
TP6011	B-5
TP GND 2	B-6
Connector	
BP6001	D-5
BP6004	B-6
P1502	E-3
P1503	E-2
P1504	D-2
P1505	D-2
P1506	A-1
P1507	E-1
P1508	E-2
P6002	C-5
P6003	D-4
P6005	D-7
P6006	D-7
P6007	C-7
P6008	D-7
P6009	C-8

ADDRESS INFORMATION

SERVO SECTION	
Transistor	
Q2001	C-7
Q2002	C-6
Transistor & Resistor	
QR2002	C-4
QR2003	A-5
QR2004	A-4
QR2006	A-4
QR2007	A-4
Integrated Circuit	
IC2001	C-4
Test Point	
TP2001	B-6
TP2002	B-5
TP2009	B-4
TP2015	B-4
TP2020	B-4
TP2025	A-4
TP2026	A-4
TP2098	A-6
TP2099	B-3
TP GND	A-4
Adjustment	
VR2001	A-5
VR2002	B-3
VR2006	A-3
VR2011	A-4
VR2013	C-4
Connector	
BP2001	B-5
P2002	B-3

ADDRESS INFORMATION

LUMINANCE & CHROMINANCE SECTION	
Transistor	
Q3001	B-9
Q3003	C-10
Q3004	B-8
Q3005	C-10
Q3050	D-10
Transistor & Resistor	
QR3001	D-9
QR3002	C-9
QR3003	B-10
QR3004	B-10
QR3006	D-9
QR3007	B-9
QR3008	B-9
Test Point	
TP3001	C-8
TP3002	B-10
Adjustment	
VR3012	C-8
VR3013	B-9
Connector	
BP3001	C-8
BP3002	C-8
P3003	B-8
P3004	C-8

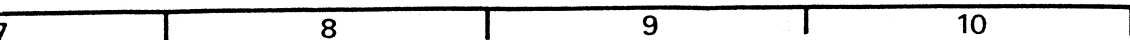
ADDRESS INFORMATION

AUDIO SECTION	
Transistor	
Q4001	D-8
Q4002	E-8
Q4003	E-8
Q4004	E-8
Q4006	D-10
Q4007	C-10
Transistor & Resistor	
QR4002	D-6
QR4003	D-8
QR4004	C-8
Integrated Circuit	
IC4001	D-8
Test Point	
TP4002	D-8
TP4003	D-8
TP4502	D-6
TP4511	D-7
Adjustment	
VR4001	D-8
VR4002	D-7
VR4004	E-5
VR4005	E-4
VR4510	D-6
Connector	
P4001	D-8
P4003	D-6
P4004	E-7

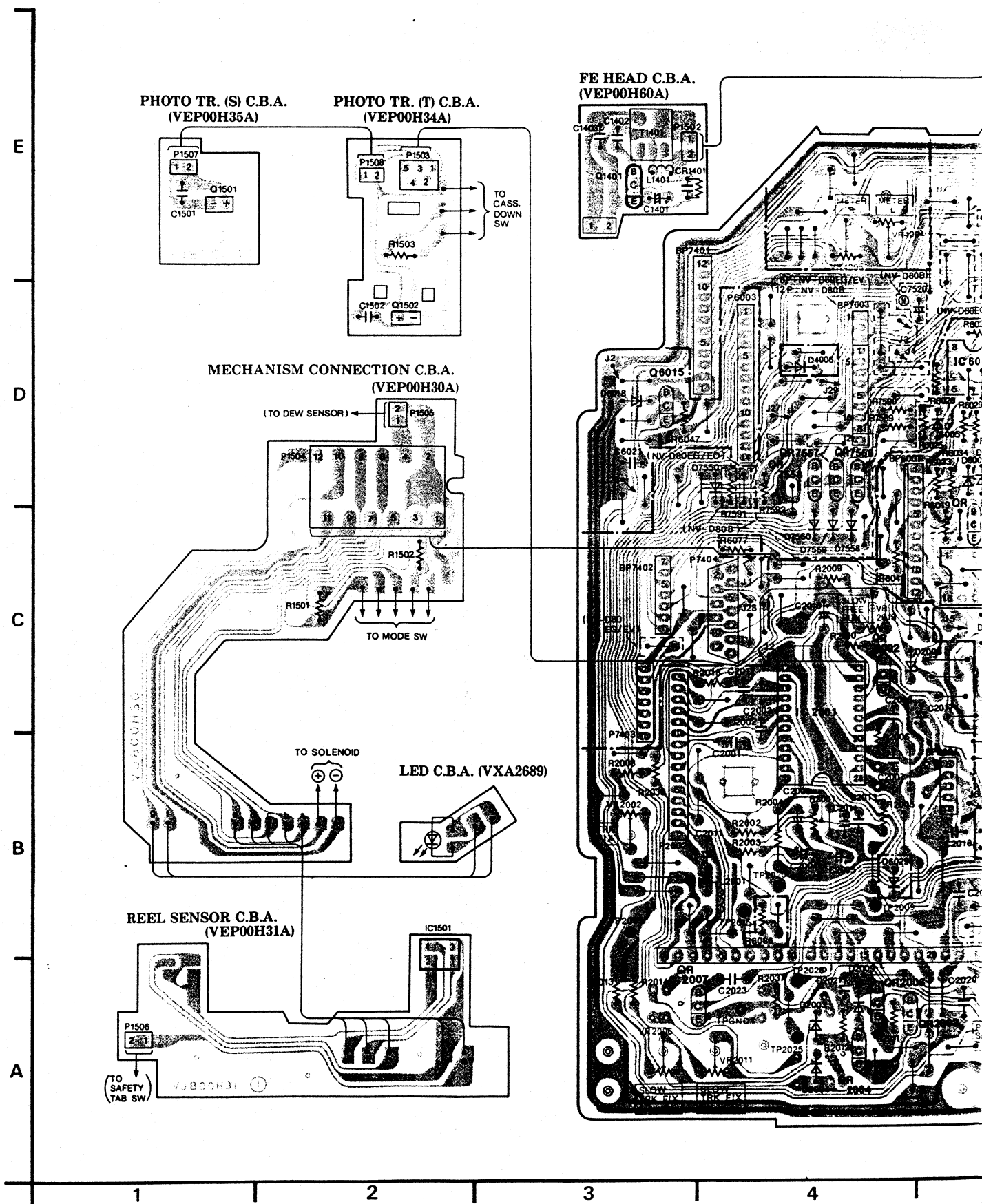
ADDRESS INFORMATION

CH SELECT SECTION	
Transistor & Resistor	
QR7551	E-9
QR7556	D-4
QR7557	D-4
QR7558	D-4
Integrated Circuit	
IC7552	E-10
IC7553	E-9
Connector	
BP7003	D-4
BP7301	B-7
BP7302	E-10
BP7401	E-4
BP7402	C-3
P7302	E-9
P7403	B-3
P7404	C-4
P7405	B-8

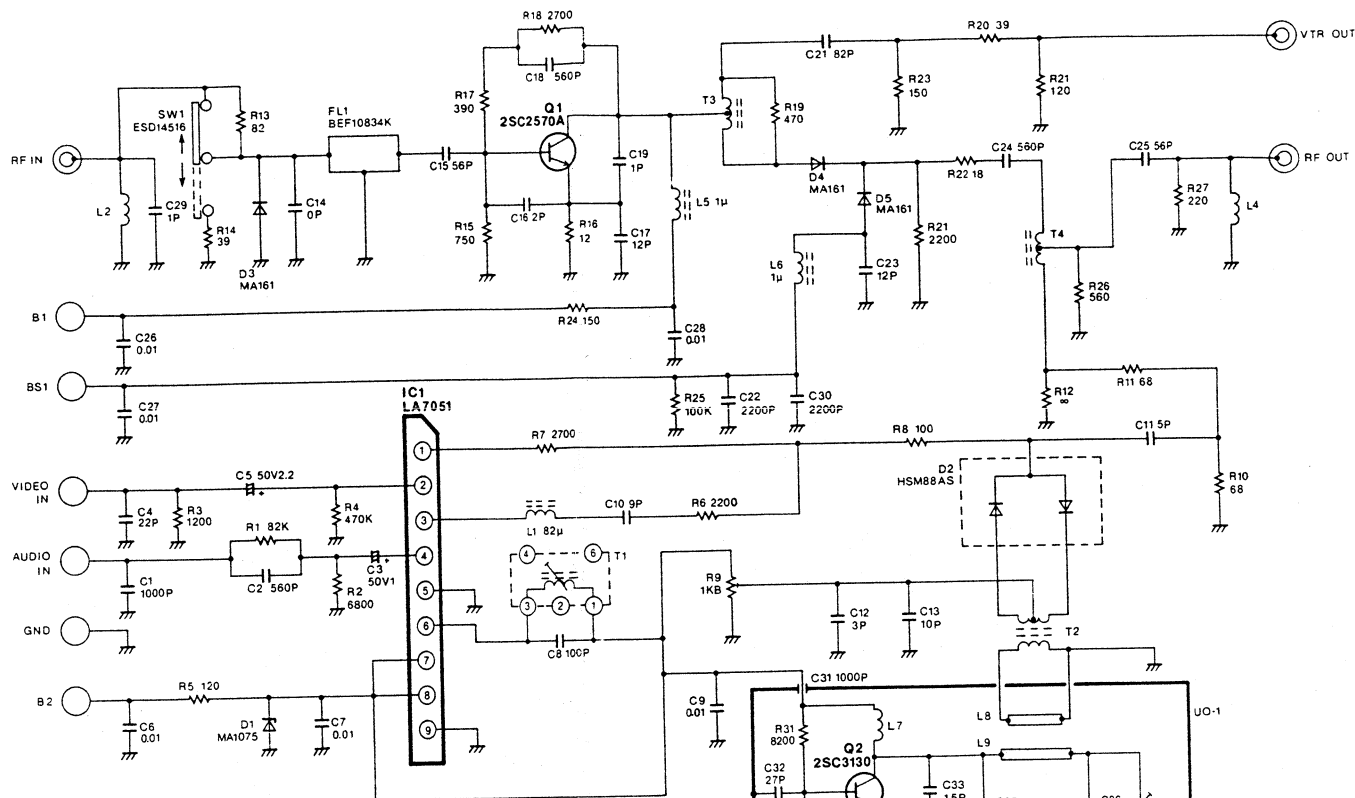
ADDRESS INFORMATION



3-55. MAIN C.B.A. (VEP03410A: NV-D80EG) (VEP03410C: NV-D80B) (VEP03410B

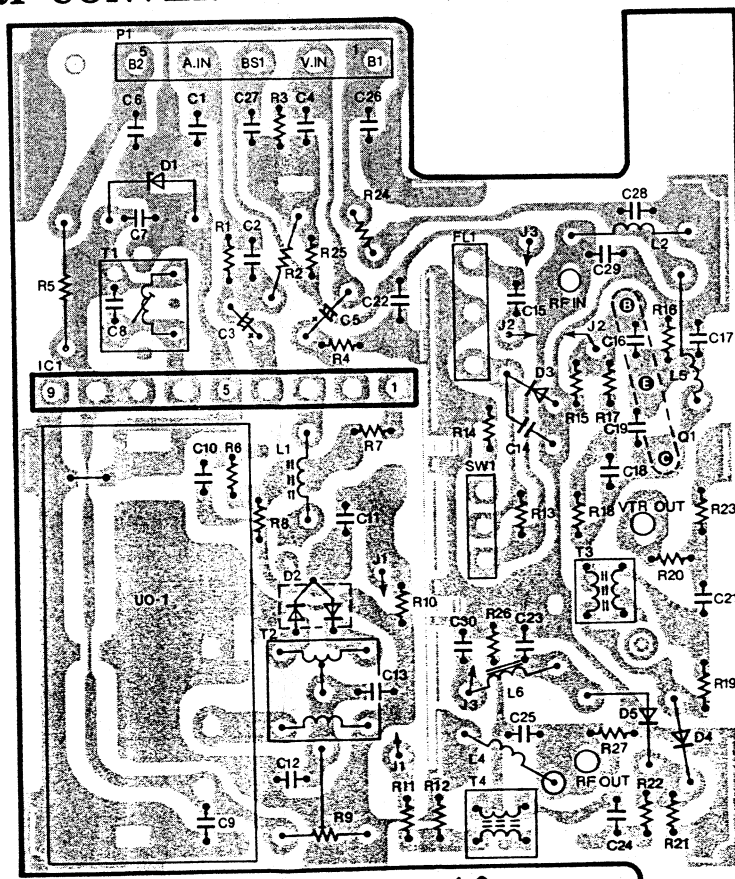


3-58. RF CONVERTER SCHEMATIC DIAGRAM (NV-D80B)

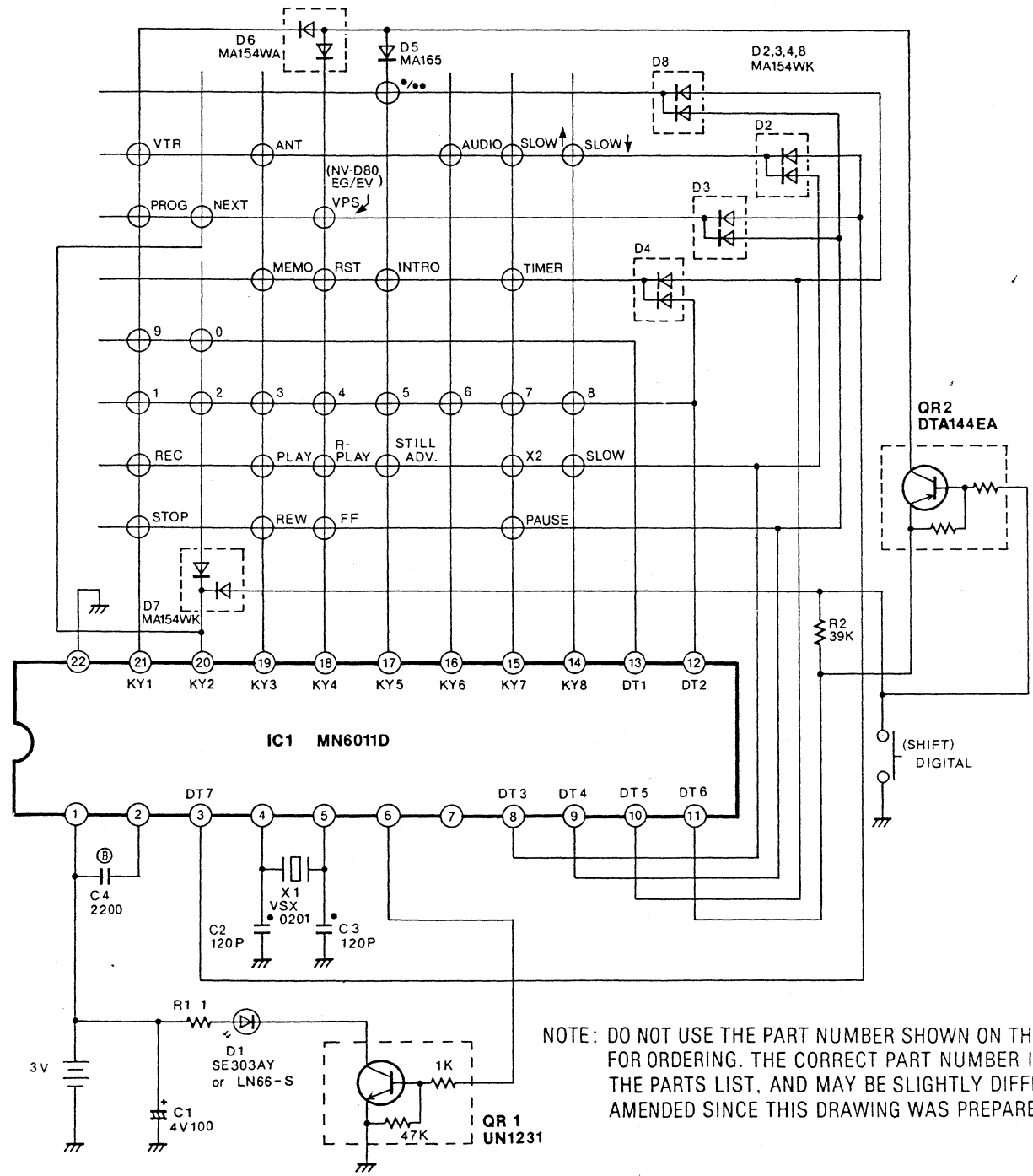


NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

3-59. RF CONVERTER C.B.A. (ENC87952: NV-D80B)

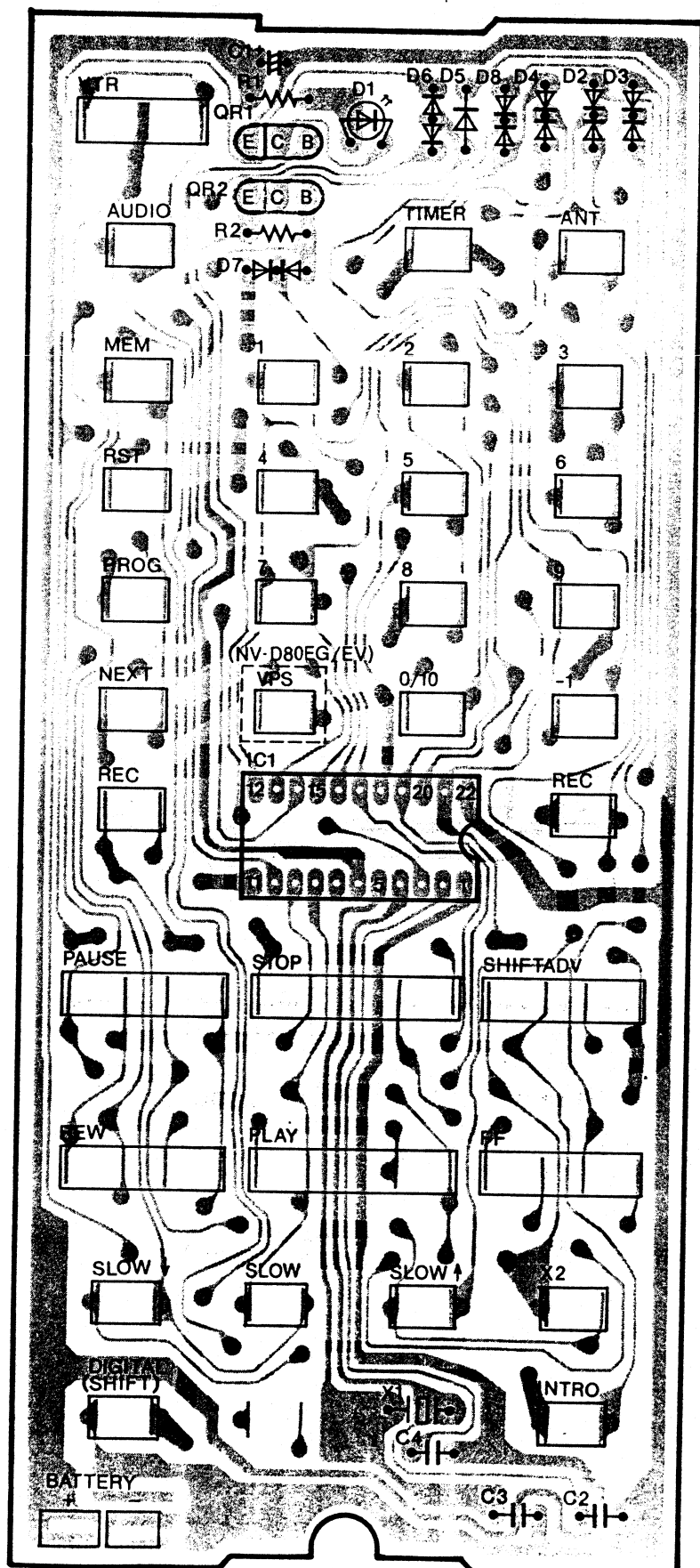


3-62. PROGRAMMABLE REMOTE CONTROLLER SCHEMATIC DIAGRAM
— UNIT NO.: VEQ0573 (NV-D80EG/EV), VEQ0574 (NV-D80B) —



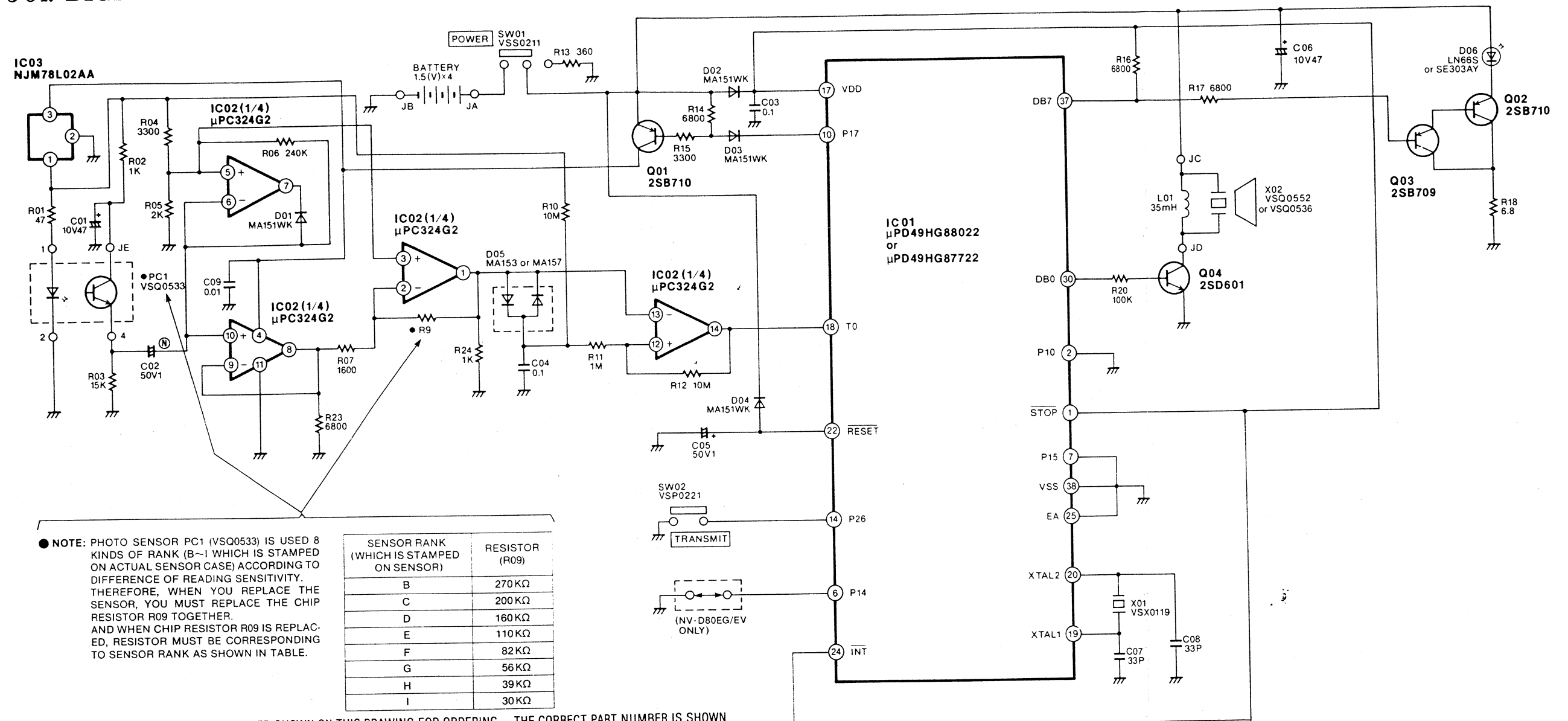
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

**3-63. PROGRAMMABLE REMOTE CONTROLLER C.B.A.
(VEP66008A)**

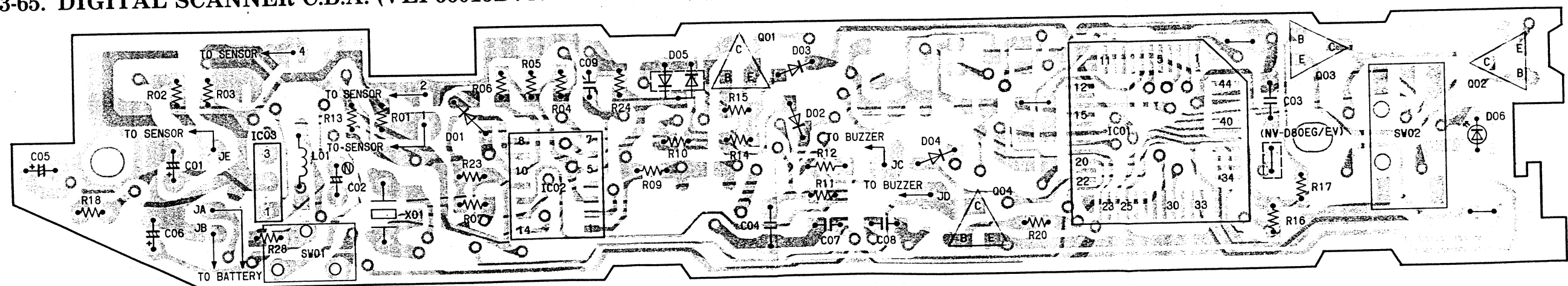


3-64. DIGITAL SCANNER SCHEMATIC DIAGRAM

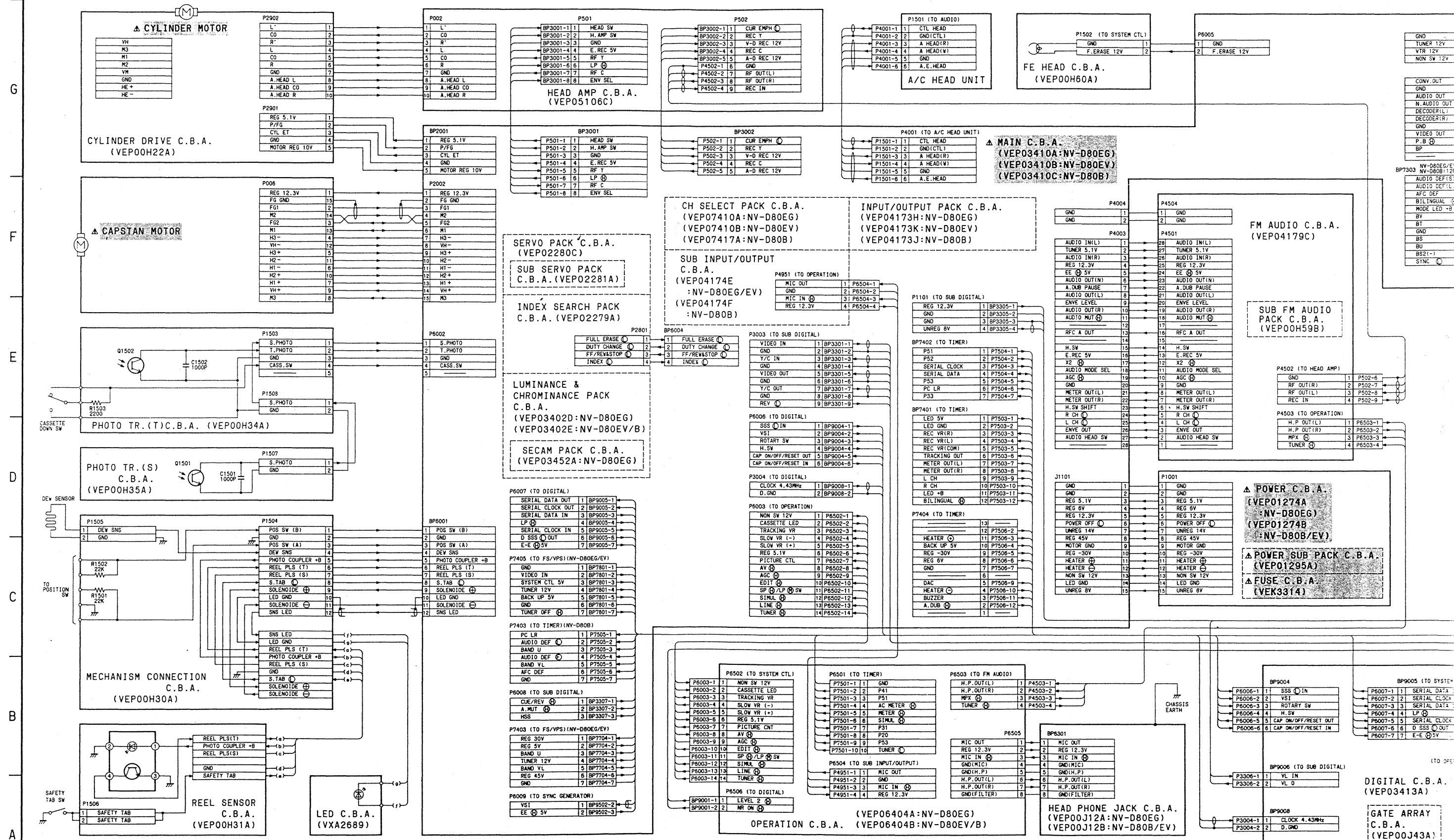
— UNIT NO.: VEQ0549 (NV-D80EG/EV), VEQ0540 (NV-D80B) —



3-65. DIGITAL SCANNER C.B.A. (VEP66019D: NV-D80EG/EV) (VEP66019E: NV-D80B)

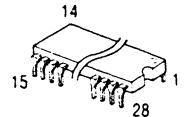


3-66. INTERCONNECTION SCHEMATIC DIAGRAM

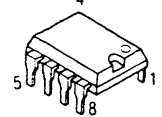


3-67. ICs & TRs INFORMATION

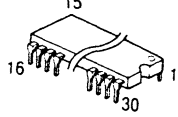
GENERAL CIRCUIT PARTS



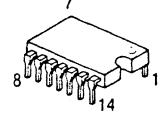
MN15311VBS
MN15521VJP



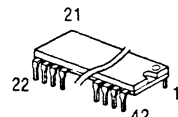
μPC393C
μPC4558C
AN6558
AN6562
AN6914



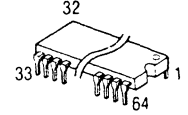
M51366SP
AN3494NK



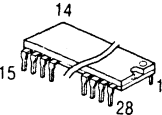
MN4066B
MN4013B
μPD4001BC
μPD74HC04C



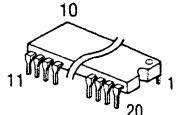
BA7721S
MN158412VYA



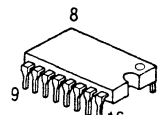
MN15362VJR
MN15283VJU



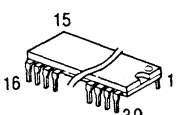
SAA5235
TDA3803A
μPD6160CA606



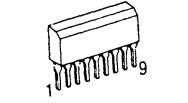
AN3224K
AN3920K
AN5034
AN3494K



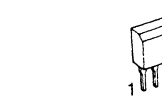
MN1220
μPD4052BC
μPD74HC123AC
μPD74HC221AC
MN4510B



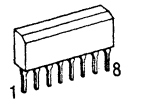
BA7711S
BU3735S



TA7348P
μPC1531HA



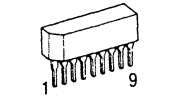
TA7302P
TA7374P



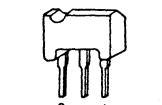
M5201L
μPC1490HA



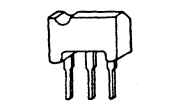
BA7056LS
BA7752LS



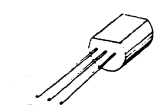
AN5421
AN6913



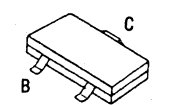
MN1280
MN1280P



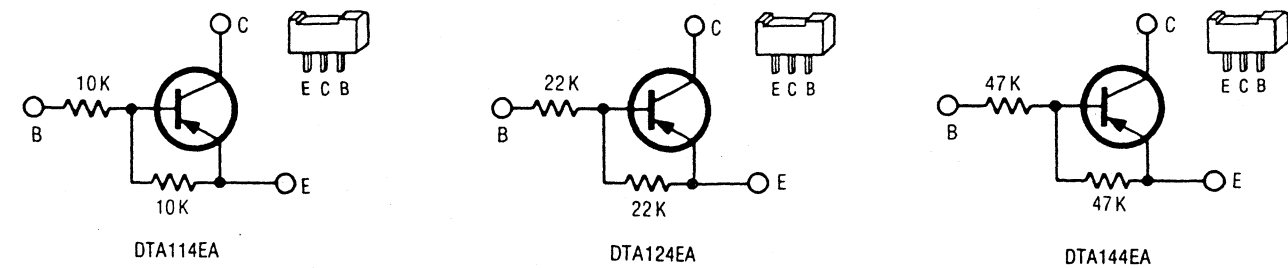
2SB641 2SC2377
2SB642 2SD636
2SB643 2SD637
2SB644 2SD638
2SB788 2SD639
2SB790 2SD1330
2SC2206 2SD958



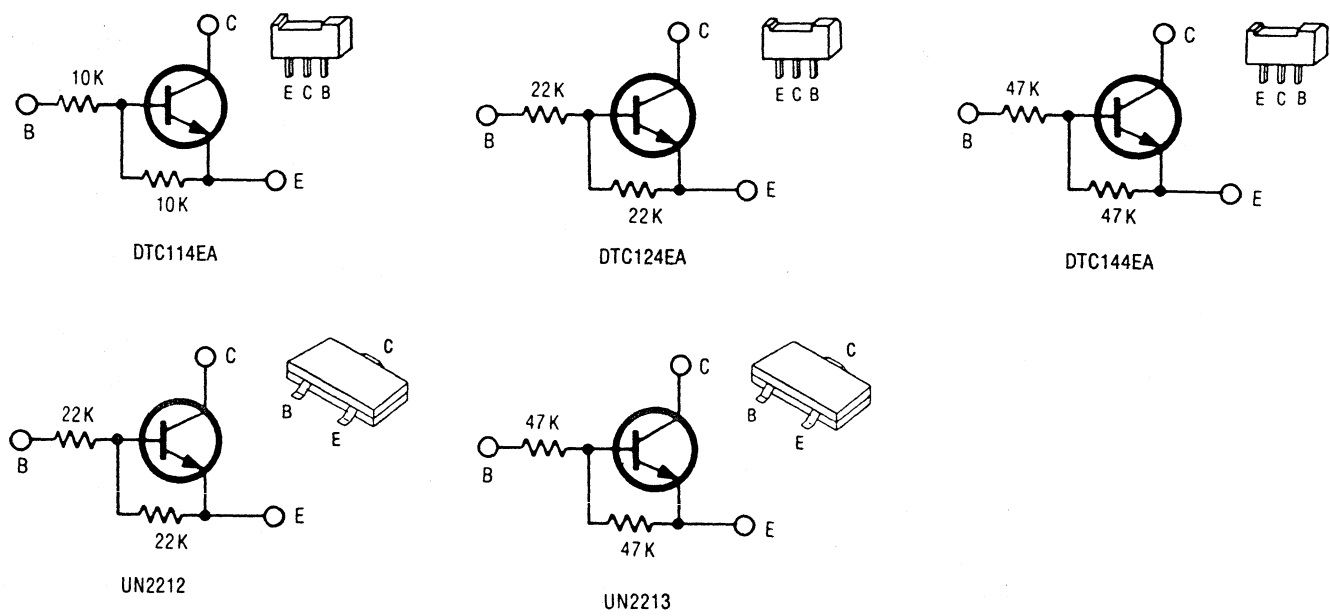
2SD893
2SC1384S
2SD655



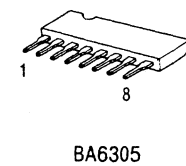
2SB709
2SC2295
2SC2404
2SD601
2SD1306
2SD1328



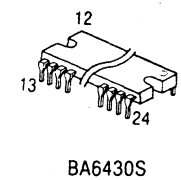
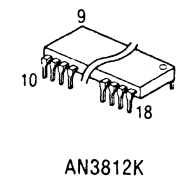
Back Page:
INTERCONNECTION Section



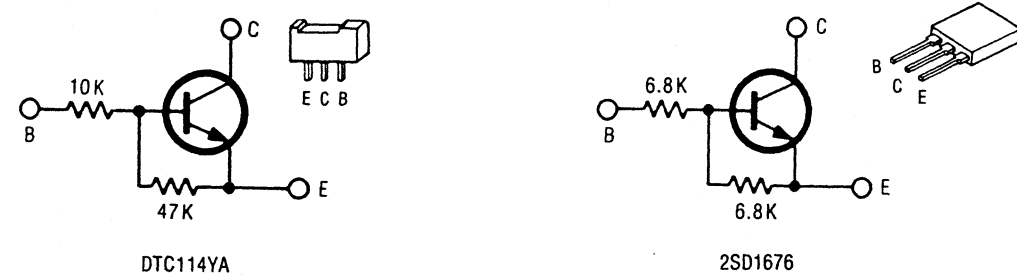
INDEX SEARCH



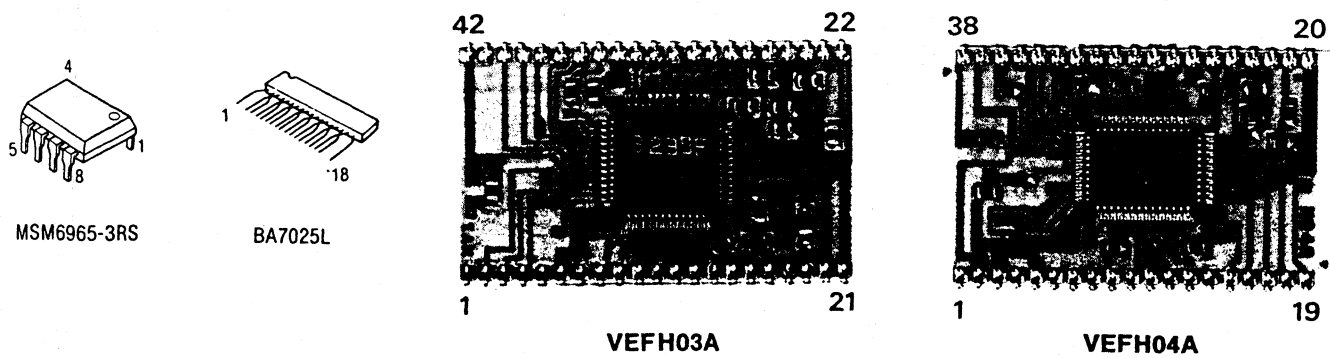
SERVO



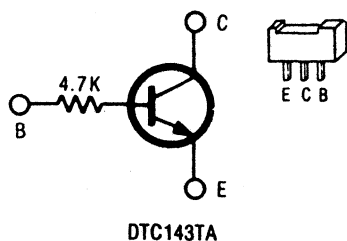
LUMINANCE & CHROMINANCE Section



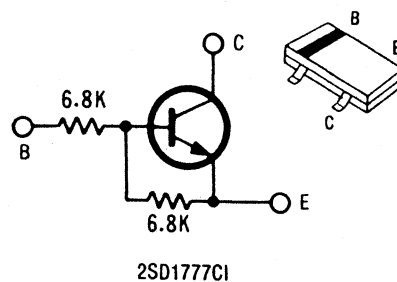
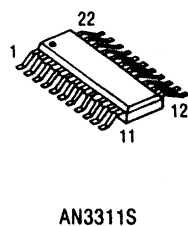
LUMINANCE & CHROMINANCE PACK



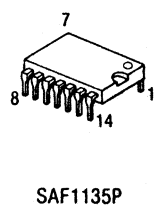
AUDIO Section



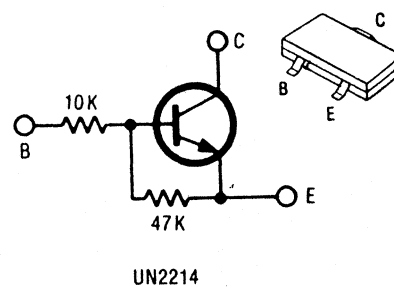
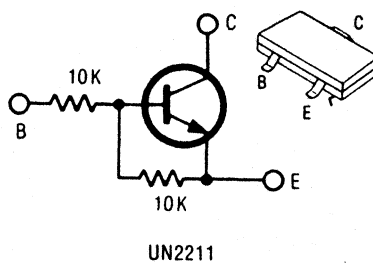
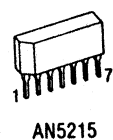
HEAD AMP



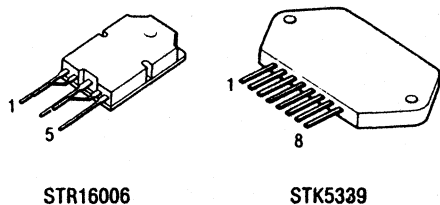
FREQUENCY SYNTHESIZER TUNER & VPS



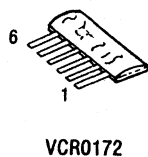
TV DEMODULATOR



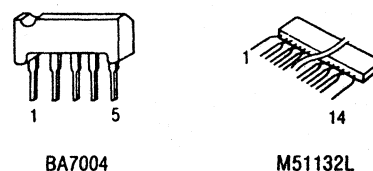
POWER



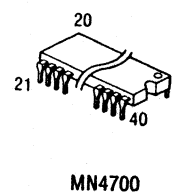
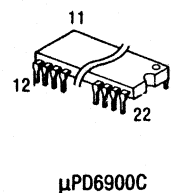
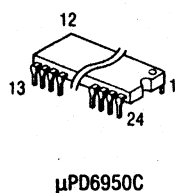
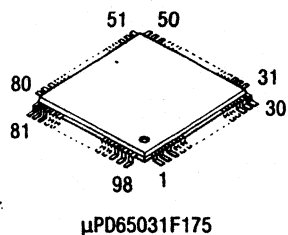
OPERATION



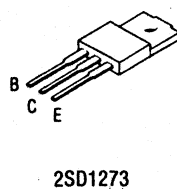
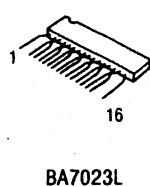
INPUT/OUTPUT PACK



DIGITAL



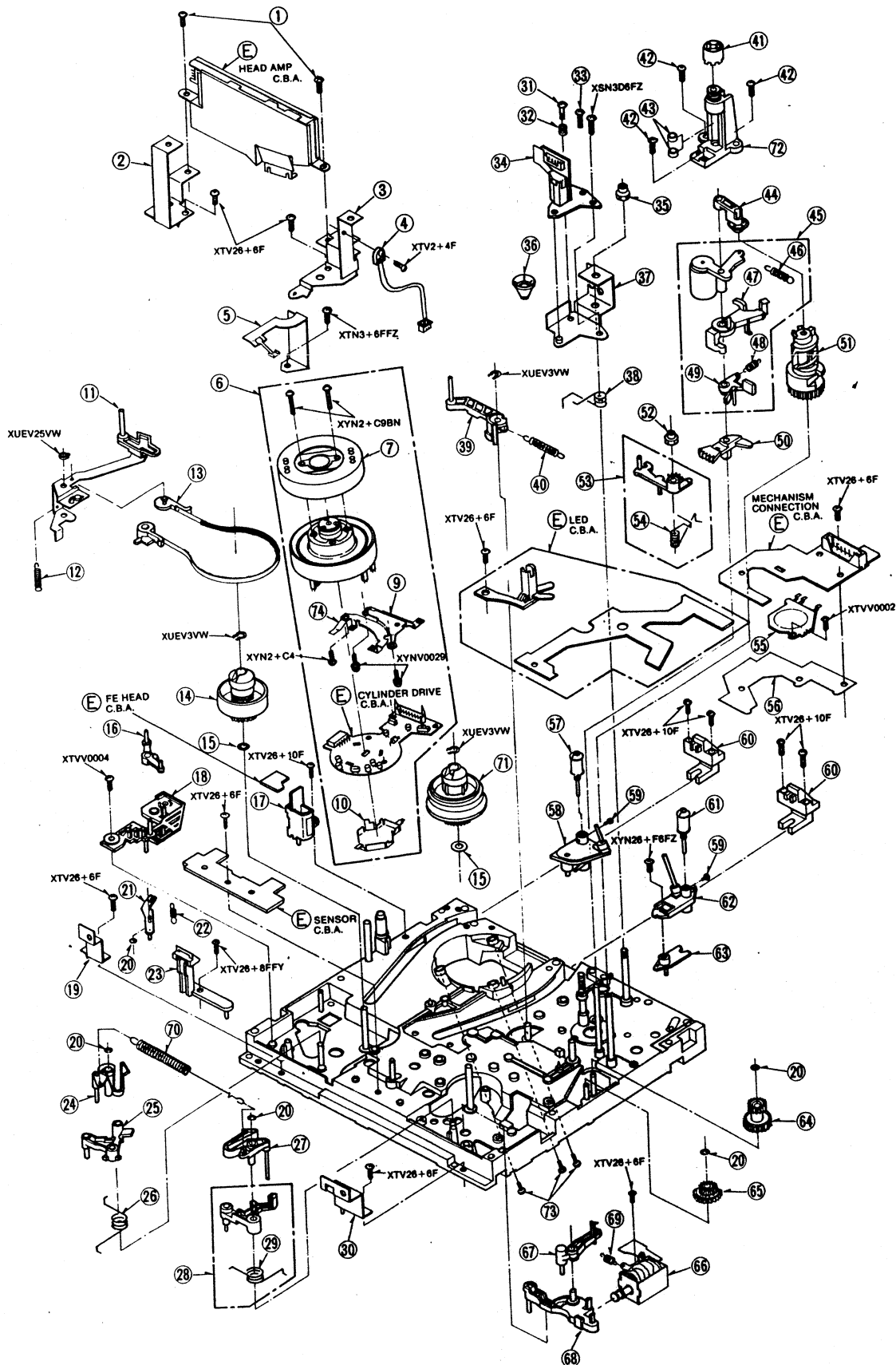
SUB DIGITAL



SECTION 4

EXPLODED VIEWS & PARTS LIST

4-1. EXPLODED VIEW ❶ CHASSIS PARTS SECTION (1)



This diagram illustrates the exploded view of a mechanical assembly, likely a watch movement. The components are numbered 100 through 145. Key parts and labels include:

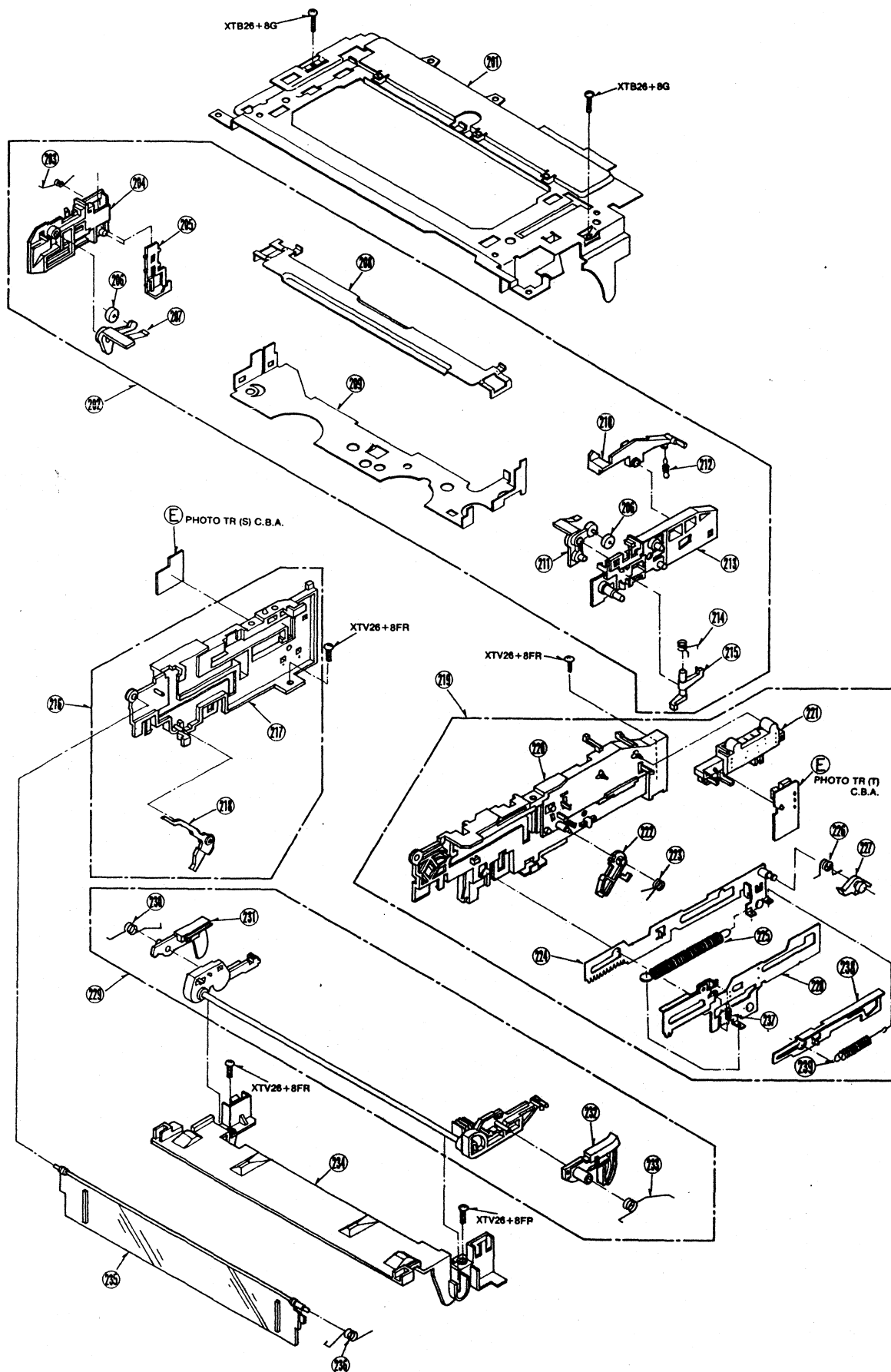
- 100**: Various small screws and pins.
- 101**: A small screw.
- 102**: A small screw.
- 103**: A small screw.
- 104**: A small screw.
- 105**: A small screw.
- 106**: A small screw.
- 107**: A small screw.
- 108**: A small screw.
- 109**: A small screw.
- 110**: A small screw.
- 111**: A small screw.
- 112**: A small screw.
- 113**: A small screw.
- 114**: A small screw.
- 115**: A small screw.
- 116**: A small screw.
- 117**: A small screw.
- 118**: A small screw.
- 119**: A small screw.
- 120**: A small screw.
- 121**: A small screw.
- 122**: A small screw.
- 123**: A small screw.
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- 131**: A small screw.
- 132**: A small screw.
- 133**: A small screw.
- 134**: A small screw.
- 135**: A small screw.
- 136**: A small screw.
- 137**: A small screw.
- 138**: A small screw.
- 139**: A small screw.
- 140**: A small screw.
- 141**: A small screw.
- 142**: A small screw.
- 143**: A small screw.
- 144**: A small screw.
- 145**: A small screw.

Labels for specific components include:

- XWGV26D5G**: A small screw.
- XTV26+6F**: A small screw.
- XSB26+4FZ**: A small screw.
- XUEV3VW**: A small screw.
- XTVV0002**: A small screw.
- XYEV0003**: A small screw.
- XYEV XYEV 0002 0003**: A small screw.
- XYNV 0015**: A small screw.

The diagram shows the assembly of various gears, levers, and screws into a central base unit. The components are arranged in a disassembled state, with lines indicating their assembly sequence.

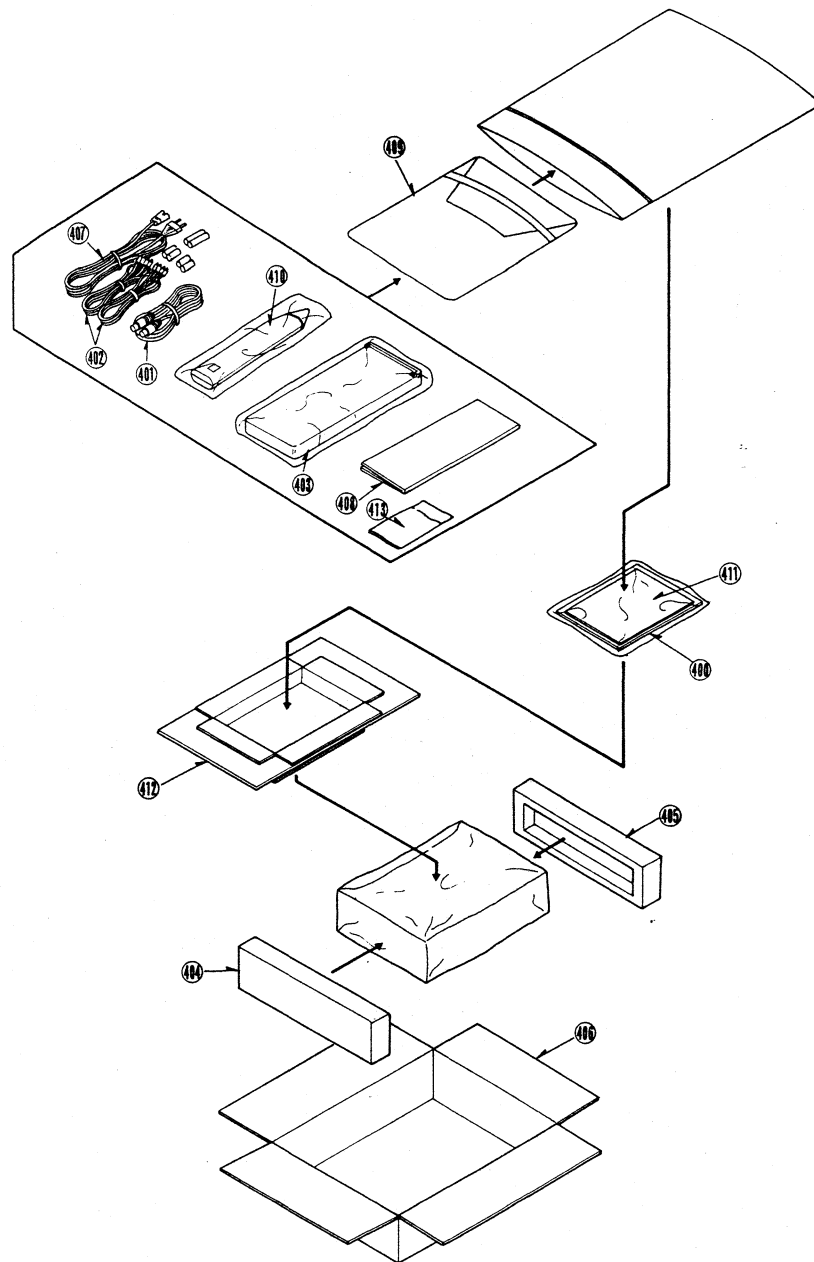
3 CASSETTE UP MECHANISM SECTION



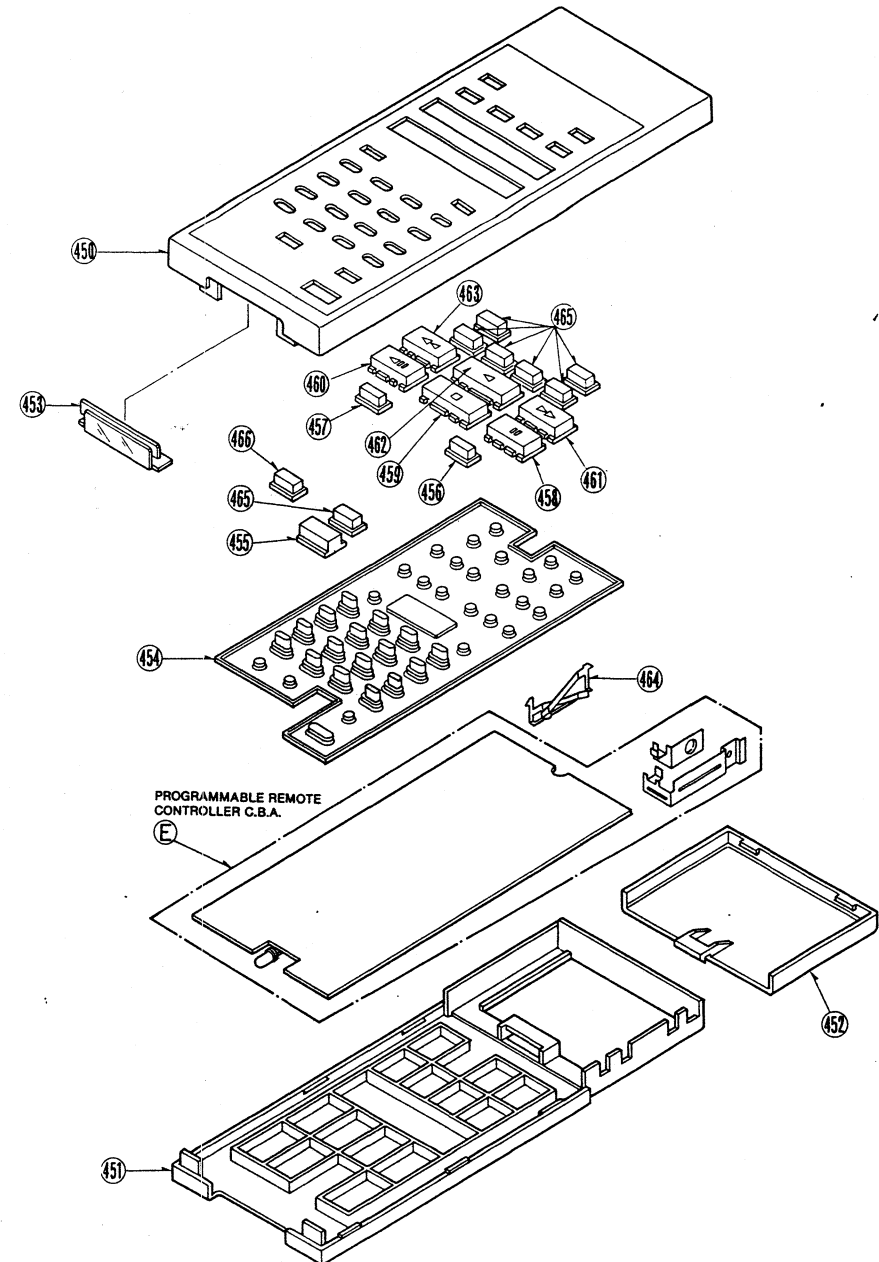
4



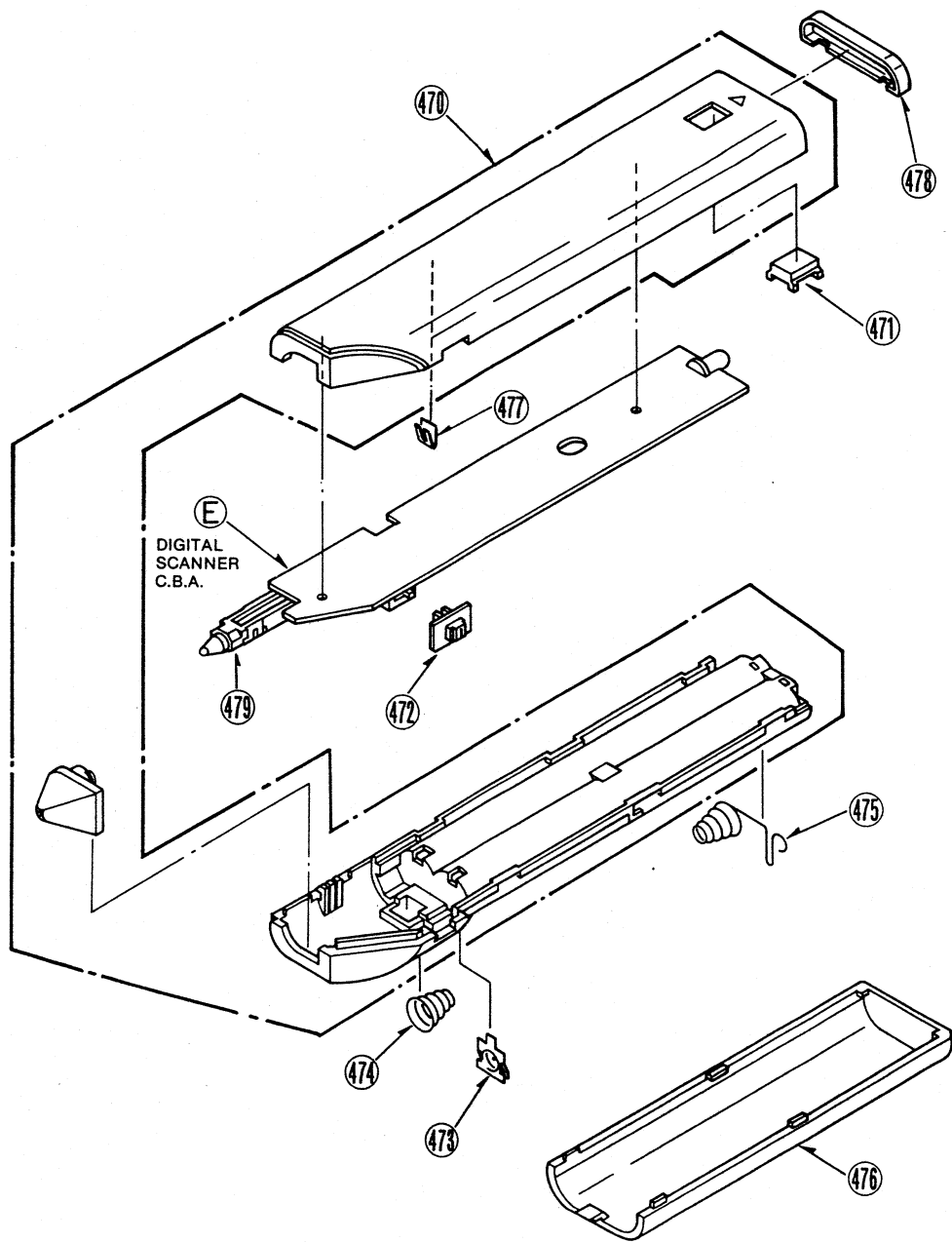
5 PACKING PARTS SECTION



⑥ PROGRAMMABLE REMOTE CONTROLLER UNIT



7 DIGITAL SCANNER



PARTS LIST

MODEL NO: NV-D80EG/EV/B

1. NV-D80EG/EV/B Mechanical Replacement Parts List

Note: 1. Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark (<1>) have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1(1)	VMD0268	HEAD AMP SET SCREW	2	
2(1)	VMA6897	HEAD AMP MOUNT ANGLE (L)	1	
3(1)	VMA6898	HEAD AMP MOUNT ANGLE (R)	1	
4(1)	VXK185	DEW SENSOR UNIT	1	
5(1)	VXA2702	EARTH PLATE UNIT	1	
6(1)	VMD0518	CYLINDER UNIT	1 (<1>)	
7(1)	VMD0339	UPPER CYLINDER UNIT	1	
9(1)	VXA2703	MAIN HOLDER UNIT	1	
10(1)	VSCI806	CYLINDER C.B.A. SHIELD PLATE	1	
11(1)	VXLI495	TENSION ARM (1) UNIT	1	
12(1)	VMB1563	TENSION SPRING	1	
13(1)	VXZ0225	TENSION BAND UNIT	1	
14(1)	VMD0145	SUPPLY REEL TABLE UNIT	1	
15(1)	VMD1171	REEL WASHER	2	
16(1)	VXLI496	TENSION RELEASE ARM(A) UNIT	1	
17(1)	VMS0038	FE HEAD	1	
18(1)	VXA2705	TENSION ARM BASE (1) UNIT	1	
19(1)	VMA6895	MOUNT ANGLE (L)	1	
20(1)	VMD1079	CUT WASHER	5	
21(1)	VXLI497	TENSION RELEASE ARM(B) UNIT	1	
22(1)	VMB1562	TENSION RELEASE SPRING	1	
23(1)	VMS0350	SAFETY SW	1	
24(1)	VXZ0229	SUPPLY MAIN BRAKE UNIT	1	
25(1)	VXZ0228	SUPPLY SOFT BRAKE (1) UNIT	1	
26(1)	VMB1564	SUPPLY SOFT BRAKE SPRING	1	
27(1)	VXZ0231	TAKE UP MAIN BRAKE UNIT	1	
28(1)	VXZ0221	TAKE UP SOFT BRAKE UNIT	1	
29(1)	VMB1561	TAKE UP SOFT BRAKE SPRING	1	
30(1)	VMA6896	MOUNT ANGLE (R)	1	
31(1)	VMD0322	ADJUST SCREW	1	
32(1)	VMB1251	ADJUST SPRING	1	
33(1)	VMD0898	ADJUST/RETURN ADJUST SCREW	1	
34(1)	VMD0117	A/C HEAD	1	
35(1)	VMD0063	M4 NYLON NUT	1	
36(1)	VMD0050	ADJUST NUT	1	
37(1)	VXA2675	HEAD BASE UNIT	1	
38(1)	VMB1567	A/C HEAD SPRING	1	
39(1)	VXLI480	SUB LOADING ARM (1) UNIT	1	
40(1)	VMB1566	SUB POST SPRING	1	
41(1)	VXQ0006	THRUST SCREW UNIT	1	
42(1)	VMD0317	HOUSING SCREW	3	
43(1)	VMD0333	OIL SEAL	2	
44(1)	VMD1078	PINCH CAM GMP	1	
45(1)	VXLI481	PRESSURE ROLLER UNIT	1	
46(1)	VMB1568	PIN PRESSURE SPRING	1	
47(1)	VML1873	PINCH PRESSURE ARM	1	
48(1)	VMB1569	PINCH PRESSURE ARM RELEASE SPRING	1	
49(1)	VML1874	PINCH LIFT ARM	1	
50(1)	VMD0357	P5 PULL OUT SECTOR GEAR	1	
51(1)	VMD0356	PINCH CAM	1	
52(1)	VMD0023	M3 NYLON NUT	1	
53(1)	VXLI485	P5 UNIT	1	
54(1)	VMB1554	P5 SPRING	1	
55(1)	VSS0175A	MODE SW	1	
56(1)	VSCI851	SHIELD PLATE	1	
57(1)	VXQ0764B	ROLLER POST UNIT	1	
58(1)	VXA2729	INCLIND BASE (S)(1) UNIT	1	
59(1)	VMD0133	ROLLER POST SCREW	2	
60(1)	VMD0910	POST STOPPER	2	
61(1)	VXQ0764A	ROLLER POST UNIT	1	
62(1)	VXA2686	INCLIND BASE(T)(1) UNIT	1	
63(1)	VXA2687	INCLIND ADJUST PLATE UNIT	1	
64(1)	VMD0334	PINCH SPEED DOWN GEAR	1	
65(1)	VMD0332	CONNECTION GEAR	1	
66(1)	VXA2693	SOLENOID	1	
67(1)	VXA2692	KICK ROD UNIT	1	
68(1)	VXA2691	SOLENOID LEVER (1) UNIT	1	
69(1)	VMD1553	KICK ROD SPRING	1	
70(1)	VMB1565	MAIN BRAKE SPRING	1	

ORDER NO. VMD8705137A
(Date of issue: MAY, 1987)

* This parts list is detachable from the manual.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
71(1)	VMD0146	TAKE UP REEL TABLE UNIT	1	
72(1)	VMD0101	HOUSING UNIT	1	
73(1)	VMD0342	CYLINDER MOUNT SCREW	3	
74(1)	VSCI843	HEAT SINK PLATE	1	
100(2)	VMD1079	CUT WASHER	8	
101(2)	VMB1583	TAKE UP SOFT BRAKE RELEASE ARM SPRING	1	
102(2)	VMB1560	MAIN LEVER SPRING	1	
103(2)	VXA2701	MAIN LEVER (1) UNIT	1	
104(2)	VMD160	SUB LEVER	1	
105(2)	VXLI500	SS BRAKE ARM UNIT	1	
106(2)	VMB1588	SS BRAKE SPRING	1	
107(2)	VXA2707	SS BRAKE BASE (1) UNIT	1	
108(2)	VXA2674	TENSION ROLLER UNIT	1	
109(2)	VXLI491	CAM FOLLOWER ARM UNIT	1	
110(2)	VML1861	DETENT ARM	1	
111(2)	VMD0346	MAIN CAM GEAR	1	
112(2)	VMD0343	SUB CAM GEAR	1	
113(2)	VMD0348	CENTRE GEAR	1	
114(2)	VMD0344	RETAINER GEAR	1	
115(2)	VMD0345	PLANET GEAR	2	
116(2)	VMD0349	CLUTCH DISK	1	
117(2)	VMB1558	CLUTCH SPRING	1	
118(2)	VMD0350	LOCK SLIDE GEAR	1	
119(2)	VMD0335	DRIVE DISK	1	
120(2)	VMD0342	RING GEAR	1	
121(2)	VMD0967	CUT WASHER	2	
122(2)	VML1859	CHANGE LEVER	1	
123(2)	VXA2672	RELEASE LEVER (1) UNIT	1	
124(2)	VMB1557	RELEASE SPRING	1	
125(2)	VML1860	RELEASE LEVER	1	
126(2)	VMD124	REEL GEAR RING	2	
127(2)	VMD0779	TAKE UP REEL GEAR UNIT	1	
128(2)	VMD0337	SUPPLY REEL GEAR	1	
129(2)	VML1858	RETURN LEVER (R)	1	
130(2)	VML1857	RETURN LEVER (L)	1	
131(2)	VMD0913	STOPPER BASE	1	
132(2)	VMD0159	TIMING BELT	1	
133(2)	VMD0777	ROTOR UNIT	1	
134(2)	VMA6998	ROTOR STOPPER	1	
135(2)	VMD2944	STATOR UNIT	1 (<1>)	
136(2)	VMA6847	SUB PLATE	1	
137(2)	VMD0767	CENTRE PULLEY UNIT	1	
138(2)	VMD0340	LOADING GEAR (T)	1	
139(2)	VMB1555	LOADING SPRING	2	
140(2)	VXLI489	LOADING ARM (T)(1) UNIT	1	
141(2)	VXA2673	SECTOR GEAR UNIT	1	
142(2)	VMD0347	LOADING CAM GEAR	1	
143(2)	VMD0339	LOADING GEAR (S)	1	
144(2)	VML1855	PLAY CONTROL ARM	1	
145(2)	VXLI487	LOADING ARM (S)(1) UNIT	1	
146(2)	VMD0336	INTERMEDIATE GEAR	1	
147(2)	VXLI490	PLAY ARM UNIT	1	
148(2)	VMD0048	FC HEAD	1	
201(3)	VMA6903	TOP PLATE	1	
202(3)	VXA2679	CASSETTE HOLDER UNIT	1	
203(3)	VMB1573	MOUNT LEVER SPRING	1	
204(3)	VMD0919	HOLDER GUIDE (L)	1	
205(3)	VMD163	MOUNT LEVER	1	
206(3)	VMD1077	ROLLER	2	
207(3)	VML1883	PRESSURE LEVER (L)	1	
208(3)	VMA6902	HOLDER ANGLE	1	
209(3)	VMA6901	CASSETTE HOLDER	1	
210(3)	VML1882	OPENER LEVER	1	
211(3)	VML1884	PRESSURE LEVER (R)	1	
212(3)	VMD0920	HOLDER GUIDE (R)	1	
213(3)	VMD1576	RELEASE SPRING	1	
214(3)	VML1881	RELEASE LEVER	1	
215(3)	VXA2676	SIDE PLATE (L) UNIT	1	
216(3)	VMD0917	SIDE PLATE (L)	1	
217(3)	VML1880	OPENER LEVER	1	
218(3)	VXA2677	SIDE PLATE (R) UNIT	1	
219(3)	VMD0918	SIDE PLATE (R)	1	
220(3)	VSS0176	SLIDE SW	1	

- 2 -

- 3 -

Note: 1. Be sure to make your orders of replacement parts according to this list.

2. IMPORTANT SAFETY NOTICE

Components identified with the mark (!) have the special characteristics for safety. When replacing any of these components, use only the same type.

3. Unless otherwise specified.

A transistor is in ONPS, K-1,000 ONPS. All capacitors are in MICRO-FARADS (UF).

4. The P.C. Board units marked width "H" show below the main assembled parts.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
				INCLUDING THE SUB SERVO PACK C.B.A. (VEPO2281A). PARTS LIST IS INCLUDED IN MAIN C.B.A.
	VEPO2281A	SUB SERVO PACK C.B.A.	1	PARTS LIST IS INCLUDED IN MAIN C.B.A.
	VEPO2279A	INDEX SEARCH PACK C.B.A.	1	PARTS LIST IS INCLUDED IN MAIN C.B.A.
	VEPO3402D	LUMINANCE & CHROMINANCE PACK C.B.A.	1	INV-DBOEG PARTS LIST IS INCLUDED IN MAIN C.B.A.
	VEPO3402E	LUMINANCE & CHROMINANCE PACK C.B.A.	1	INV-DBOEV/B PARTS LIST IS INCLUDED IN MAIN C.B.A.
	VEPO3452A	SCRM PACK C.B.A.	1	INV-DBOEG PARTS LIST IS INCLUDED IN MAIN C.B.A.
	VEPO7410A	CH SELECT PACK C.B.A.	1	INV-DBOEG PARTS LIST IS INCLUDED IN MAIN C.B.A.
	VEPO7410B	CH SELECT PACK C.B.A.	1	INV-DBOEV PARTS LIST IS INCLUDED IN MAIN C.B.A.
	VEPO7417A	CH SELECT PACK C.B.A.	1	INV-DBO8 PARTS LIST IS INCLUDED IN MAIN C.B.A.
	VEPO4173H	INPUT/OUTPUT PACK C.B.A.	1	INV-DBOEC PARTS LIST IS INCLUDED IN MAIN C.B.A.
	VEPO4173K	INPUT/OUTPUT PACK C.B.A.	1	INV-DBOEV PARTS LIST IS INCLUDED IN MAIN C.B.A.
	VEPO4173J	INPUT/OUTPUT PACK C.B.A.	1	INV-DBO8 PARTS LIST IS INCLUDED IN MAIN C.B.A.
	VEPO4174E	SUB INPUT/OUTPUT C.B.A.	1	INV-DBOEG/EV

Ref.No.	Part No.	Part Name & Description	Pos	Remarks
				INCLUDED IN TUNER C.B.A. (VEP07391A)
	VEP07406D	TV DEMODULATOR INTERFACE C.B.A.	1	NV-D80EC INCLUDING THE TV DEMODULATOR C.B. (VEP07372A) TUNER/ARU C.B.A. (VEP07358D) MUTING C.B.A. (VEP07364A), DECODER C.B.A. (VEP07359A)
	VEP07406B	TV DEMODULATOR INTERFACE C.B.A.	1	NV-D80EV INCLUDING THE TV DEMODULATOR C.B. (VEP07372A) TUNER/ARU C.B.A. (VEP07372D) DECODER C.B.A. (VEP07359A)
	VEP00H51C	TV DEMODULATOR INTERFACE C.B.A.	1	NV-D80B INCLUDING THE TV DEMODULATOR C.B. (VEP07372A) TUNER/ARU C.B.A. (VEP07373A) MUTING C.B.A. (VEP07364A)
	VEP07357G	TV DEMODULATOR C.B.A.	1	NV-D80EC INCLUDED IN TV DEMOMULATOR INTERFACE C.B.A.
	VEP07357F	TV DEMODULATOR C.B.A.	1	NV-D80EV INCLUDED IN TV DEMOMULATOR INTERFACE C.B.A.
	VEP07376A	TV DEMODULATOR C.B.A.	1	NV-D80B INCLUDED IN TV DEMOMULATOR INTERFACE C.B.A.
	VEP07358D	TUNER/ARU C.B.A.	1	NV-D80EC INCLUDED IN TV DEMOMULATOR INTERFACE C.B.A.
	VEP07372D	TUNER/ARU C.B.A.	1	NV-D80EV INCLUDED IN TV DEMOMULATOR INTERFACE C.B.A.
	VEP07373A	TUNER/ARU C.B.A.	1	NV-D80B INCLUDED IN TV DEMOMULATOR INTERFACE C.B.A.
	VEP07364A	MUTING C.B.A.	1	NV-D80EC/B INCLUDED IN TV DEMOMULATOR INTERFACE C.B.A.
	VEP07381A	FREQUENCY SYNTHESIZER TUNER & VPS C.B.A.	1	NV-D80EC

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	VEP07301B	FREQUENCY SYNTHESIZER TUNER & VPS C.B.A.	1	NV-D80EV
	VEP07359A	DECODER C.B.A.	1	NV-D80EV
	VEP01274A	POWER C.B.A.	1	NV-D80EV INCLUDING THE POWER SUB PACK C.B.A. (VEP01295A).
	VEP01274B	POWER C.B.A.	1	NV-D80EV/B INCLUDING THE POWER SUB PACK C.B.A. (VEP01295A).
	VEP01295A	POWER SUB PACK C.B.A.	1	PARTS LIST IS INCLUDED IN POWER C.B.A. (1)
	VEP00112A	HEAD PHONE JACK C.B.A.	1	NV-D80EV
	VEP00112B	HEAD PHONE JACK C.B.A.	1	NV-D80EV/B
	VEP66008A	PROGRAMMABLE REMOTE CONTROLLER C.B.A.	1	
	VEP00022A	CYLINDER DRIVE C.B.A.	1	
	VEP00000A	MECHANISM CONNECTION C.B.A.	1	
	VEP00031A	HEEL SENSOR C.B.A.	1	
	VIA2689	LED C.B.A. UNIT	1	
	VEP00034A	PHOTO TR(I) C.B.A.	1	
	VEP00035A	PHOTO TR(S) C.B.A.	1	
	VEP00086A	FE HEAD C.B.A.	1	
	ENC07956	RF CONVERTER C.B.A.	1	NV-D80EV(1)
	ENC07954	RF CONVERTER C.B.A.	1	NV-D80EV(1)
	ENC07952	RF CONVERTER C.B.A.	1	NV-D80EV(1)
	VEP66019D	DIGITAL SCANNER C.B.A.	1	NV-D80EV/B
	VEP66019E	DIGITAL SCANNER C.B.A.	1	NV-D80EV

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C241	BCDAJH470	ELECTROLYTIC 6.3V 470	1	
C242	BCDAJH032FN	CHIP 50V 0.01U	1	
C243	BCDAJH032FN	CHIP 50V 0.01U	1	
C244	BCDAJH047	ELECTROLYTIC 25V 4.7U	1	
C245	BCDAJH5620N	CHIP 50V 5600P	1	
C246	BCDAJH04J2	MYLAR 50V 0.1U	1	
C247	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C248	BCDAJH0200N	CHIP 50V 1000P	1	
C249	BCDAJH0101C	CERAMIC 50V 100P	1	
C250	BCDAJH0270C	CERAMIC 50V 270P	1	
C251	BCDAJH0101C	CERAMIC 50V 18P	1	
C252	BCDAJH470	ELECTROLYTIC 6.3V 47U	1	
C253	BCDAJH032FN	CERAMIC 50V 0.01U	1	
C254	VCYD10473W1	SEMICONDUCTOR 16V 0.047U	1	
C255	BCDAJH3320N	CERAMIC 50V 3300P	1	
C256	BCDAJH01030N	CHIP 50V 0.01U	1	
C301	BCDAJH002R2	ELECTROLYTIC 25V 2.2U	1	
C302	BCDAJH047	ELECTROLYTIC 25V 4.7U	1	
C303	BCDAJH042FN	CHIP 25V 0.1U	1	
C304	BCDAJH031	ELECTROLYTIC 6.3V 330U	1	
C305	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C306	BCDAJH047	ELECTROLYTIC 25V 4.7U	1	
C307	BCDAJH070JCN	CHIP 50V 47P	1	
C308	BCDAJH220JCN	CHIP 50V 22P	1	
C309	BCDAJH4732FN	CHIP 50V 0.047U	1	
C310	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C311	BCDAJH0100JCN	CHIP 50V 18P	1	
C312	BCDAJH0100JCN	CHIP 50V 18P	1	
C313	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C314	BCDAJH560JCN	CHIP 50V 56P	1	
C315	BCDAJH090JCN	CHIP 50V 39P	1	
C316	BCDAJH020JCN	CHIP 50V 82P	1	
C317	BCDAJH470	ELECTROLYTIC 10V 47U	1	
C318	BCDAJH020JCN	CHIP 50V 22P	1	
C319	BCDAJH4710N	CHIP 50V 470P	1	
C320	BCDAJH270JCN	CHIP 50V 27P	1	
C321	BCDAJH0010	ELECTROLYTIC 50V 1U	1	
C322	BCDAJH02R2	ELECTROLYTIC 50V 2.2U	1	
C323	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C324	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C325	BCDAJH032FN	CHIP 50V 0.01U	1	
C326	BCDAJH032FN	CHIP 50V 0.01U	1	
C327	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C328	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C329	BCDAJH032FN	CHIP 50V 0.01U	1	
C330	BCDAJH032FN	CHIP 50V 0.01U	1	
C331	BCDAJH032FN	CHIP 50V 0.01U	1	
C332	BCDAJH0334J2	MYLAR 50V 0.33U	1	
C333	BCDAJH047	ELECTROLYTIC 50V 4.7U	1	
C334	BCDAJH032FN	CHIP 50V 0.01U	1	
C335	BCDAJH060JCN	CHIP 50V 68P	1	
C336	BCDAJH010JCN	CHIP 50V 100P	1	
C337	BCDAJH270JCN	CHIP 50V 27P	1	
C338	BCDAJH042FN	CHIP 25V 0.1U	1	
C339	BCDAJH060JCN	CHIP 50V 68P	1	
C340	BCDAJH047	ELECTROLYTIC 25V 4.7U	1	
C341	BCDAJH331JCN	CHIP 50V 330P	1	
C342	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C343	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C344	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C345	BCDAJH032FN	CHIP 50V 0.01U	1	
C346	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C347	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C348	BCDAJH0100	ELECTROLYTIC 16V 10U	1	
C349	BCDAJH070JCN	CHIP 50V 47P	1	
C350	BCDAJH220JCN	CERAMIC 50V 22P	1	
C351	BCDAJH562J2	MYLAR 50V 5600P	1	
C352	BCDAJH330JCN	CERAMIC 50V 33P	1	
C353	BCDAJH032FN	CHIP 50V 0.01U	1	
C354	BCDAJH032FN	CHIP 50V 0.01U	1	
C355	BCDAJH032FN	CHIP 50V 0.01U	1	
C356	BCDAJH032FN	CHIP 50V 0.01U	1	
C357	BCDAJH032FN	CHIP 50V 0.01U	1	
C358	BCDAJH032FN	CHIP 50V 0.01U	1	
C359	BCDAJH032FN	CHIP 50V 0.01U	1	
C360	BCDAJH032FN	CHIP 50V 0.01U	1	
C361	BCDAJH032FN	CHIP 50V 0.01U	1	
C362	BCDAJH032FN	CHIP 50V 0.01U	1	
C363	BCDAJH032FN	CHIP 50V 0.01U	1	
C364	BCDAJH032FN	CHIP 50V 0.01U	1	
C365	BCDAJH032FN	CHIP 50V 0.01U	1	
C366	BCDAJH032FN	CHIP 50V 0.01U	1	
C367	BCDAJH032FN	CHIP 50V 0.01U	1	
C368	BCDAJH032FN	CHIP 50V 0.01U	1	
C369	BCDAJH032FN	CHIP 50V 0.01U	1	
C370	BCDAJH032FN	CHIP 50V 0.01U	1	
C371	BCDAJH032FN	CHIP 50V 0.01U	1	
C372	BCDAJH032FN	CHIP 50V 0.01U	1	
C373	BCDAJH032FN	CHIP 50V 0.01U	1	
C374	BCDAJH032FN	CHIP 50V 0.01U	1	
C375	BCDAJH032FN	CHIP 50V 0.01U	1	
C376	BCDAJH032FN	CHIP 50V 0.01U	1	
C377	BCDAJH032FN	CHIP 50V 0.01U	1	
C378	BCDAJH032FN	CHIP 50V 0.01U	1	
C379	BCDAJH032FN	CHIP 50V 0.01U	1	
C380	BCDAJH032FN	CHIP 50V 0.01U	1	
C381	BCDAJH032FN	CHIP 50V 0.01U	1	
C382	BCDAJH032FN	CHIP 50V 0.01U	1	
C383	BCDAJH032FN	CHIP 50V 0.01U	1	
C384	BCDAJH032FN	CHIP 50V 0.01U	1	
C385	BCDAJH032FN	CHIP 50V 0.01U	1	
C386	BCDAJH032FN	CHIP 50V 0.01U	1	
C387	BCDAJH032FN	CHIP 50V 0.01U	1	
C388	BCDAJH032FN	CHIP 50V 0.01U	1	
C389	BCDAJH032FN	CHIP 50V 0.01U	1	
C390	BCDAJH032FN	CHIP 50V 0.01U	1	
C391	BCDAJH032FN	CHIP 50V 0.01U	1	
C392	BCDAJH032FN	CHIP 50V 0.01U	1	
C393	BCDAJH032FN	CHIP 50V 0.01U	1	
C394	BCDAJH032FN	CHIP 50V 0.01U	1	
C395	BCDAJH032FN	CHIP 50V 0.01U	1	
C396	BCDAJH032FN	CHIP 50V 0.01U	1	
C397	BCDAJH032FN	CHIP 50V 0.01U	1	
C398	BCDAJH032FN	CHIP 50V 0.01U	1	
C399	BCDAJH032FN	CHIP 50V 0.01U	1	
C400	BCDAJH032FN	CHIP 50V 0.01U	1	

- 10 -

- 11 -

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2018	ER062TJ330	CARBON 1/4W 33K	1	
R2019	ER062TJ363	CARBON 1/4W 68K	1	
R2020	ER062TJ333	CARBON 1/4W 33K	1	
R2031	ER062TJ473	CARBON 1/4W 47K	1	
R2032	ER062TJ124	CARBON 1/4W 120K	1	
R2033	ER062TJ683	CARBON 1/4W 68K	1	
R2034	ER062TJ391	CARBON 1/4W 390	1	
R2036	ER062TJ103	CARBON 1/4W 10K	1	
R2037	ER062TJ104	CARBON 1/4W 100K	1	
R2039	ER062TJ473	CARBON 1/4W 47K	1	
R2800	ER062TJ104	CARBON 1/4W 100K	1	
R2801	ER062TJ103	CARBON 1/4W 10K	1	
R2802	ER062TJ103	CARBON 1/4W 10K	1	
R2803	ER062TJ561	CARBON 1/4W 560	1	
R2804	ER062TJ393	CARBON 1/4W 39K	1	
R2805	ER062TJ332	CARBON 1/4W 3.3K	1	
R2806	ER062TJ221	CARBON 1/4W 220	1	
R2807	ER062TJ823	CARBON 1/4W 82K	1	
R2808	ER062TJ103	CARBON 1/4W 10K	1	
R2809	ER062TJ750	CARBON 1/4W 75	1	
R2810	ER062TJ124	CARBON 1/4W 120K	1	
R2811	ER062TJ102	CARBON 1/4W 10K	1	
R2812	ER062TJ153	CARBON 1/4W 15K	1	
R2813	ER062TJ221	CARBON 1/4W 220	1	
R2814	ER062TJ102	CARBON 1/4W 1K	1	
R2815	ER062TJ473	CARBON 1/4W 47K	1	
R2816	ER062TJ473	CARBON 1/4W 47K	1	
R2817	ER062TJ223	CARBON 1/4W 22K	1	
R2818	ER062TJ102	CARBON 1/4W 1K	1	
R2819	ER062TJ124	CARBON 1/4W 120K	1	
R2820	ER062TJ221	CARBON 1/4W 220	1	
R2821	ER062TJ103	CARBON 1/4W 10K	1	
R2822	ER062TJ124	CARBON 1/4W 120K	1	
R2823	ER062TJ273	CARBON 1/4W 27K	1	
R2824	ER062TJ154	CARBON 1/4W 150K	1	
R2825	ER062TJ102	CARBON 1/4W 1K	1	
R2826	ER062TJ154	CARBON 1/4W 150K	1	
R2827	ER062TJ153	CARBON 1/4W 15K	1	
R2828	ER062TJ222	CARBON 1/4W 2.2K	1	
R2829	ER062TJ681	CARBON 1/4W 680	1	
R2830	ER062TJ683	CARBON 1/4W 68K	1	
R2831	ER062TJ272	CARBON 1/4W 2.7K	1	
R2832	ER062TJ822	CARBON 1/4W 8.2K	1	
R2833	ER062TJ103	CARBON 1/4W 10K	1	
R2834	ER062TJ472	CARBON 1/4W 4.7K	1	
R2835	ER062TJ105	CARBON 1/4W 1000K	1	
R2836	ER062TJ222	CARBON 1/4W 2.2K	1	
R2837	ER062TJ222	CARBON 1/4W 2.2K	1	
R2838	ER062TJ223	CARBON 1/4W 22K	1	
R2839	ER062TJ102	CARBON 1/4W 1K	1	
R2840	ER062TJ102	CARBON 1/4W 1K	1	
R3001	ER062TJ471	CARBON 1/4W 470	1	
R3004	ER062TJ103	CARBON 1/4W 10K	1	
R3005	ER062TJ472	CARBON 1/4W 4.7K	1	
R3006	ER062TJ561	CARBON 1/4W 560	1	
R3008	ER062TJ102	CARBON 1/4W 1K	1	
R3011	ER062TJ102	CARBON 1/4W 1K	1	
R3012	ER062TJ561	CARBON 1/4W 560	1	
R3013	ER062TJ223	CARBON 1/4W 22K	1	
R3014	ER062TJ103	CARBON 1/4W 10K	1	
R3015	ER062TJ103	CARBON 1/4W 10K	1	
R3017	ER062TJ471	CARBON 1/4W 470	1	
R3018	ER062TJ102	CARBON 1/4W 1K	1	
R3050	ER062TJ473	CARBON 1/4W 47K	1	
R3901	ER062TJ750	CARBON 1/4W 75	1	
R3902	ER062TJ750	CARBON 1/4W 75	1	
R3903	ER062TJ472	CARBON 1/4W 4.7K	1	
R3904	ER062TJ472	CARBON 1/4W 4.7K	1	
R3905	ER062TJ104	CARBON 1/4W 100K	1	
R3906	ER062TJ750	CARBON 1/4W 75	1	
R3907	ER062TJ750	CARBON 1/4W 75	1	
R3909	ER062TJ750	CARBON 1/4W 75	1	
R3910	ER062TJ750	CARBON 1/4W 75	1	
R3911	ER062TJ152	CARBON 1/4W 1.5K	1	
R3912	ER062TJ392	CARBON 1/4W 3.9K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3913	ER062TJ102	CARBON 1/4W 1K	1	
R3914	ER062TJ152	CARBON 1/4W 1.5K	1	
R3915	ER062TJ561	CARBON 1/4W 560	1	
R3951	ER062TJ750	CARBON 1/4W 75	1	
R3952	ER062TJ562	CARBON 1/4W 5.6K	1	
R3953	ER062TJ562	CARBON 1/4W 5.6K	1	
R3954	ER062TJ684	CARBON 1/4W 680K	1	
R3955	ER062TJ684	CARBON 1/4W 680K	1	
RA001	ER062TJ100	CARBON 1/4W 10	1	
RA002	ER062TJ562	CARBON 1/4W 5.6K	1	
RA004	ER062TJ563	CARBON 1/4W 56K	1	
RA005	ER062TJ621	METAL OXIDE 1/4W 1.3K	1	
RA006	ER062TJ123	CARBON 1/4W 12K	1	
RA009	ER062TJ823	CARBON 1/4W 82K	1	
RA010	ER062TJ683	CARBON 1/4W 68K	1	
RA011	ER062TJ334	CARBON 1/4W 330K	1	
RA012	ER062TJ331	CARBON 1/4W 330	1	
RA013	ER062TJ103	CARBON 1/4W 10K	1	
RA014	ER062TJ472	CARBON 1/4W 4.7K	1	
RA015	ER062TJ105	CARBON 1/4W 1000K	1	
RA016	ER062TJ562	CARBON 1/4W 5.6K	1	
RA017	ER062TJ223	CARBON 1/4W 22K	1	
RA018	ER062TJ122	CARBON 1/4W 1.2K	1	
RA019	ER062TJ472	CARBON 1/4W 4.7K	1	
RA020	ER062TJ602	METAL OXIDE 1/4W 16K	1	
RA021	ER062TJ103	CARBON 1/4W 10K	1	
RA022	ER062TJ123	CARBON 1/4W 12K	1	
RA023	ER062TJ333	CARBON 1/4W 33K	1	
RA024	ER062TJ152	CARBON 1/4W 1.5K	1	
RA025	ER062TJ151	CARBON 1/4W 150	1	
RA026	ER062TJ152	CARBON 1/4W 1.5K	1	
RA027	ER062TJ561	CARBON 1/4W 560	1	
RA030	ER062TJ222	CARBON 1/4W 2.2K	1	
RA031	ER062TJ472	CARBON 1/4W 4.7K	1	
RA032	ER062TJ470	CARBON 1/4W 47	1	
RA033	ER062TJ104	CARBON 1/4W 100K	1	
RA036	ER062TJ223	CARBON 1/4W 22K	1	
RA037	ER062TJ561	CARBON 1/4W 560	1	
RA038	ER062TJ100	CARBON 1/4W 10	1	
RA040	ER062TJ472	CARBON 1/4W 4.7K	1	
RA041	ER062TJ183	CARBON 1/4W 18K	1	
RA901	ER062TJ102	CARBON 1/4W 1K	1	
RA902	ER062TJ222	CARBON 1/4W 2.2K	1	
RA903	ER062TJ222	CARBON 1/4W 2.2K	1	
RA904	ER062TJ101	CARBON 1/4W 100	1	
RA905	ER062TJ101	CARBON 1/4W 100	1	
RA906	ER062TJ471	CARBON 1/4W 470	1	WV-D80EV/B
RA907	ER062TJ471	CARBON 1/4W 470	1	WV-D80EV/B
RA908	ER062TJ471	CARBON 1/4W 470	1	WV-D80EC
RA909	ER062TJ471	CARBON 1/4W 470	1	WV-D80EC
RA910	ER062TJ222	CARBON 1/4W 2.2K	1	
RA911	ER062TJ222	CARBON 1/4W 2.2K	1	
RA912	ER062TJ221	CARBON 1/4W 220	1	
RA913	ER062TJ221	CARBON 1/4W 220	1	
RA914	ER062TJ471	CARBON 1/4W 470	1	WV-D80EV/B
RA915	ER062TJ471	CARBON 1/4W 470	1	WV-D80EV/B
RA916	ER062TJ471	CARBON 1/4W 470	1	WV-D80EC
RA917	ER062TJ471	CARBON 1/4W 470	1	WV-D80EC
RA918	ER062TJ224	CARBON 1/4W 220K	1	
RA919	ER062TJ682	CARBON 1/4W 6.8K	1	
RA920	ER062TJ682	CARBON 1/4W 6.8K	1	
RA922	ER062TJ201	METAL OXIDE 1/4W 2.2K	1	
RA923	ER062TJ201	METAL OXIDE 1/4W 2.2K	1	
RA951	ER062TJ472	CARBON 1/4W 4.7K	1	
RA952	ER062TJ472	CARBON 1/4W 4.7K	1	
RA953	ER062TJ153	CARBON 1/4W 15K	1	
RA954	ER062TJ473	CARBON 1/4W 47K	1	
RA955	ER062TJ473	CARBON 1/4W 47K	1	
RA956	ER062TJ473	CARBON 1/4W 47K	1	
RA957	ER062TJ473	CARBON 1/4W 47K	1	
RA958	ER062TJ2702	METAL OXIDE 1/4W 27K	1	WV-D80EC/EV
RA958	ER062TJ4701	METAL OXIDE 1/4W 4.7K	1	WV-D80B
RA959	ER062TJ2702	METAL OXIDE 1/4W 27K	1	WV-D80EC/EV
RA959	ER062TJ4701	METAL OXIDE 1/4W 4.7K	1	WV-D80B
RA960	ER062TJ683	CARBON 1/4W 68K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4961	ER062TJ153	CARBON 1/4W 15K	1	
R4962	ER062TJ153	CARBON 1/4W 15K	1	
R4963	ER062TJ153	CARBON 1/4W 15K	1	
R4964	ER062TJ153	CARBON 1/4W 15K	1	
R4965	ER062TJ153	CARBON 1/4W 15K	1	
R4966	ER062TJ474	CARBON 1/4W 470K	1	
R4967	ER062TJ474	CARBON 1/4W 470K	1	
R4968	ER062TJ683	CARBON 1/4W 68K	1	
R4969	ER062TJ474	CARBON 1/4W 470K	1	
R4970	ER062TJ474	CARBON 1/4W 470K	1	
R4971	ER062TJ684	CARBON 1/4W 680K	1	
R4972	ER062TJ684	CARBON 1/4W 680K	1	
R4973	ER062TJ563	CARBON 1/4W 56K	1	
R4974	ER062CKG3902	METAL OXIDE 1/4W 39K	1	
R4975	ER062TJ474	CARBON 1/4W 470K	1	
R4976	ER062CKG3902	METAL OXIDE 1/4W 39K	1	
R4977	ER062TJ123	CARBON 1/4W 12K	1	
R4978	ER062TJ474	CARBON 1/4W 470K	1	
R4979	ER062TJ473	CARBON 1/4W 47K	1	
R4980	ER062TJ473	CARBON 1/4W 47K	1	
R4981	ER062TJ123	CARBON 1/4W 12K	1	
R4982	ER062TJ473	CARBON 1/4W 47K	1	
R4983	ER062TJ123	CARBON 1/4W 12K	1	
R4984	ER062TJ473	CARBON 1/4W 47K	1	
R4985	ER062TJ474	CARBON 1/4W 470K	1	
R4986	ER062TJ474	CARBON 1/4W 470K	1	
R4987	ER062TJ124	CARBON 1/4W 120K	1	
R4988	ER062TJ104	CARBON 1/4W 100K	1	
R4989	ER062TJ124	CARBON 1/4W 120K	1	
R4990	ER062TJ473	CARBON 1/4W 47K	1	
R4991	ER062TJ473	CARBON 1/4W 47K	1	
R4992	ER062TJ473	CARBON 1/4W 47K	1	
R4993	ER062TJ473	CARBON 1/4W 47K	1	
R4994	ER062TJ682	CARBON 1/4W 6.8K	1	
R4995	ER062TJ393	CARBON 1/4W 39K	1	
R4996	ER062TJ123	CARBON 1/4W 12K	1	
R5001	ER062TJ470	CARBON 1/2W 47	1	
R5002	ER062TJ473	CARBON 1/4W 47K	1	
R5005	ER062TJ332	CARBON 1/4W 3.3K	1	
R5006	ER02P02220	CARBON 2W 22	1	(1)
R5007	ER062TJ122	CARBON 1/4W 1.2K	1	
R5008	ER062TJ181	CARBON 1/4W 180	1	
R5009	ER062TJ561	CARBON 1/4W 560	1	
R5010	ER062TJ102	CARBON 1/4W 1K	1	
R5011	ER062TJ221	CARBON 1/4W 220	1	
R5016	ER062TJ223	CARBON 1/4W 22K	1	
R5017	ER062TJ223	CARBON 1/4W 22K	1	
R5019	ER062TJ153	CARBON 1/4W 15K	1	
R5022	ER062TJ223	CARBON 1/4W 22K	1	
R5023	ER062TJ683	CARBON 1/4W 68K	1	
R5024	ER062TJ223	CARBON 1/4W 22K	1	
R5025	ER062TJ824	CARBON 1/4W 820K	1	
R5026	ER062TJ105	CARBON 1/4W 1000K	1	
R5027	ER062TJ223	CARBON 1/4W 22K	1	
R5028	ER062TJ184	CARBON 1/4W 180K	1	
R5029	ER062TJ561	CARBON 1/4W 560	1	
R5030	ER062TJ153	CARBON 1/4W 15K	1	
R5031	ER062TJ153	CARBON 1/4W 15K	1	
R5032	ER062TJ332	CARBON 1/4W 3.3K	1	
R5033	ER062TJ333	CARBON 1/4W 33K	1	
R5034	ER062TJ333	CARBON 1/4W 33K	1	
R5035	ER062TJ101	CARBON 1/4W 100	1	
R5036	ER062TJ101	CARBON 1/4W 100	1	
R5037	ER062TJ101	CARBON 1/4W 100	1	
R5038	ER062TJ272	CARBON 1/4W 2.7K	1	
R5041	ER062TJ391	CARBON 1/4W 390	1	
R5042	ER062TJ332	CARBON 1/4W 3.3K	1	
R5045	ER062TJ562	CARBON 1/4W 5.6K	1	
R5046	ER062TJ152	CARBON 1/4W 1.5K	1	
R5047	ER062TJ681	CARBON 1/4W 680	1	
R5048	ER062TJ562	CARBON 1/4W 5.6K	1	
R5049	ER062TJ332	CARBON 1/4W 3.3K	1	
R5050	ER062TJ562	CARBON 1/4W 5.6K	1	
R5051	ER062TJ332	CARBON 1/4W 3.3K	1	
R5052	ER062TJ562	CARBON 1/4W 5.6K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3358	BC0A10K470	ELECTROLYTIC 16V 470	1	
C3359	BC0A10K047	MYLAR 50V 0.10	1	
C3360	BC0A10K000	ELECTROLYTIC 16V 100	1	
C3361	BC0A10K000	ELECTROLYTIC 16V 100	1	
C3362	BC0A10K000	ELECTROLYTIC 16V 100	1	
C3363	BC0A10K047	MYLAR 50V 0.10	1	
C3364	BC0A10K470	ELECTROLYTIC 16V 470	1	
C3365	BC0A10K000	ELECTROLYTIC 10V 1000	1	
C3366	BC0A10K000	CERAMIC 50V 1000P	1	
C3367	BC0A10K000	CERAMIC 50V 1000P	1	
C3368	BC0A10K000	ELECTROLYTIC 10V 1000	1	
C3369	BC0A10K237	MYLAR 50V 0.0125	1	
C3370	BC0A10K047	MYLAR 50V 0.10	1	
C3371	BC0A10K000	ELECTROLYTIC 16V 100	1	
C3372	BC0A10K000	CERAMIC 50V 0.010	1	
C3373	BC0A10K000	ELECTROLYTIC 16V 100	1	
C3374	BC0A10K000	CERAMIC 50V 3P	1	
C3375	BC0A10K000	CERAMIC 50V 3P	1	
C3376	BC0A10K000	CERAMIC 50V 3P	1	
C3377	BC0A10K000	ELECTROLYTIC 10V 33P	1	
C3378	BC0A10K000	ELECTROLYTIC 16V 1000	1	
C3379	BC0A10K000	CERAMIC 50V 1000P	1	
C3380	BC0A10K000	ELECTROLYTIC 16V 100	1	
C3381	BC0A10K000	MYLAR 50V 0.010	1	
C3382	BC0A10K000	ELECTROLYTIC 16V 220	1	
C3383	BC0A10K000	ELECTROLYTIC 6.3V 1000	1	
C3384	BC0A10K000	CERAMIC 50V 10P	1	
C3385	BC0A10K047	MYLAR 50V 0.10	1	
DIODES				
D3301	PA165	DIODE	1	
D3302	PA165	DIODE	1	
D3305	PA4039H	DIODE	1	
D3306	PA4039H	DIODE	1	
D3307	PA165	DIODE	1	
D3309	PA165	DIODE	1	
D3310	PA165	DIODE	1	
D3311	PA165	DIODE	1	
D3312	PA165	DIODE	1	
D3313	PA165	DIODE	1	
DELAY LINE				
DL3301	VL00116	DELAY LINE	1	
FILTERS				
FL3301	VL00546	FILTER	1	
FL3302	VL00546	FILTER	1	
FL3303	VL00546	FILTER	1	
FL3304	VL00546	FILTER	1	
FL3305	VL00523	FILTER	1	
ICs				
IC3301	TA7348P	IC	1	
IC3302	TA7348P	IC	1	
IC3303	UPD74HC123AC	IC	1	
IC3304	BA7023L	IC	1	
IC3305	AN3594K	IC	1	
IC3306	TA7348P	IC	1	
IC3307	TA7348P	IC	1	
IC3308	UPD4001BC	IC	1	
COILS				
L3301	VL0005P101K	COIL 1000H	1	
L3302	VL0005P101K	COIL 1000H	1	
L3303	VL0005P101K	COIL 1000H	1	
L3304	VL0005P101K	COIL 8.20H	1	
L3305	VL0005P101K	COIL 8.20H	1	
L3306	VL0005P101K	COIL 1000H	1	
L3307	VL0005P101K	COIL 1000H	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L3308	VL0005P101K	COIL 1000H	1	
L3309	VL0005P101K	COIL 1000H	1	
L3310	VL0005P101K	COIL 1000H	1	
L3311	VL0005P101K	COIL 1000H	1	
CONNECTORS				
P1101	WJ1231R	CONNECTOR (FEMALE)	1	
P3003	WJ1236R	CONNECTOR	1	
P3302	WJ1231T	CONNECTOR (FEMALE) 4P	1	
P3303	WJ1231T	CONNECTOR (FEMALE) 4P	1	
P3304	WJ1235T	CONNECTOR (FEMALE) 8P	1	
P3306	WJ1229T	CONNECTOR (FEMALE) 2P	1	
P6008	WJ1236T	CONNECTOR	1	
P7508	WJ1235T	CONNECTOR	1	
TRANSISTORS				
Q3301	2S86-41	TRANSISTOR	1	
Q3302	2S86-36	TRANSISTOR	1	
Q3303	2S86-36	TRANSISTOR	1	
Q3305	2S86-36	TRANSISTOR	1	
Q3307	2S86-36	TRANSISTOR	1	
Q3308	2S86-41	TRANSISTOR	1	
Q3309	2S86-36	TRANSISTOR	1	
Q3310	2S86-36	TRANSISTOR	1	
Q3311	2S86-36	TRANSISTOR	1	
Q3312	2S86-41	TRANSISTOR	1	
Q3313	2S86-36	TRANSISTOR	1	
Q3314	2S86-41	TRANSISTOR	1	
Q3315	2S86-36	TRANSISTOR	1	
Q3316	2S86-36	TRANSISTOR	1	
Q3317	2S86-41	TRANSISTOR	1	
Q3318	2S86-36	TRANSISTOR	1	
Q3319	2S86-41	TRANSISTOR	1	
Q3320	2S86-36	TRANSISTOR	1	
Q3321	2S86-36	TRANSISTOR	1	
Q3322	2S86-41	TRANSISTOR	1	
Q3323	2S86-273	TRANSISTOR	1	
Q3324	2S86-36	TRANSISTOR	1	
Q3325	2S86-273	TRANSISTOR	1	
Q3326	2S86-36	TRANSISTOR	1	
Q3327	2S86-36	TRANSISTOR	1	
Q3328	2S86-41	TRANSISTOR	1	
Q3329	2S86-36	TRANSISTOR	1	
Q3330	2S86-36	TRANSISTOR	1	
Q3331	2S86-36	TRANSISTOR	1	
Q3332	2S86-41	TRANSISTOR	1	
COMBINATION PARTS				
OR3301	UN1213	TRANSISTOR-RESISTOR	1	
OR3302	UN1213	TRANSISTOR-RESISTOR	1	
OR3303	UN1213	TRANSISTOR-RESISTOR	1	
OR3304	UN1213	TRANSISTOR-RESISTOR	1	
OR3305	UN1213	TRANSISTOR-RESISTOR	1	
OR3306	UN1213	TRANSISTOR-RESISTOR	1	
OR3307	UN1213	TRANSISTOR-RESISTOR	1	
RESISTORS				
R3301	ERDS2TJ102	CARBON 1/4W 1K	1	
R3302	ERDS2TJ102	CARBON 1/4W 1K	1	
R3303	ERDS2TJ393	CARBON 1/4W 39K	1	
R3304	ERDS2TJ823	CARBON 1/4W 82K	1	
R3305	ERDS2TJ332	CARBON 1/4W 3.3K	1	
R3306	ERDS2TJ392	CARBON 1/4W 3.9K	1	
R3307	ERDS2TJ332	CARBON 1/4W 3.3K	1	
R3309	ERDS2TJ153	CARBON 1/4W 15K	1	
R3310	ERDS2TJ102	CARBON 1/4W 1K	1	
R3312	ERDS2TJ152	CARBON 1/4W 1.5K	1	
R3313	ERDS2TJ182	CARBON 1/4W 1.8K	1	
R3314	ERDS2TJ393	CARBON 1/4W 39K	1	
R3315	ERDS2TJ823	CARBON 1/4W 82K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3316	ERDS2TJ332	CARBON 1/4W 3.3K	1	
R3317	ERDS2TJ332	CARBON 1/4W 3.3K	1	
R3318	ERDS2TJ332	CARBON 1/4W 3.3K	1	
R3319	ERDS2TJ122	CARBON 1/4W 1.2K	1	
R3321	ERDS2TJ102	CARBON 1/4W 1K	1	
R3322	ERDS2TJ183	CARBON 1/4W 1.8K	1	
R3323	ERDS2TJ153	CARBON 1/4W 15K	1	
R3324	ERDS2TJ391	CARBON 1/4W 390	1	
R3325	ERDS2TJ391	CARBON 1/4W 390	1	
R3326	ERDS2TJ182	CARBON 1/4W 1.8K	1	
R3327	ERDS2TJ182	CARBON 1/4W 1.8K	1	
R3328	ERDS2TJ473	CARBON 1/4W 47K	1	
R3329	ERDS2TJ151	CARBON 1/4W 150	1	
R3330	ERDS2TJ101	CARBON 1/4W 100	1	
R3331	ERDS2TJ182	CARBON 1/4W 1.8K	1	
R3332	ERDS2TJ182	CARBON 1/4W 1.8K	1	
R3333	ERDS2TJ473	CARBON 1/4W 47K	1	
R3334	ERDS2TJ473	CARBON 1/4W 47K	1	
R3335	ERDS2TJ332	CARBON 1/4W 3.3K	1	
R3336	ERDS2TJ104	CARBON 1/4W 100K	1	
R3337	ERDS2TJ333	CARBON 1/4W 33K	1	
R3338	ERDS2TJ472	CARBON 1/4W 4.7K	1	
R3339	ERDS2TJ332	CARBON 1/4W 3.3K	1	
R3340	ERDS2TJ152	CARBON 1/4W 1.5K	1	
R3341	ERDS2TJ222	CARBON 1/4W 2.2K	1	
R3342	ERDS2TJ472	CARBON 1/4W 4.7K	1	
R3343	ERDS2TJ301	METAL OXIDE 1/4W 1.3K	1	
R3344	ERDS2TJ332	CARBON 1/4W 3.3K	1	
R3345	ERDS2TJ122	CARBON 1/4W 1.2K	1	
R3346	ERDS2TJ472	CARBON 1/4W 4.7K	1	
R3347	ERDS2TJ301	METAL OXIDE 1/4W 1.1K	1	
R3348	ERDS2TJ104	CARBON 1/4W 100K	1	
R3349	ERDS2TJ333	CARBON 1/4W 33K	1	
R3350	ERDS2TJ332	CARBON 1/4W 3.3K	1	
R3351	ERDS2TJ472	CARBON 1/4W 4.7K	1	
R3352	ERDS2TJ222	CARBON 1/4W 2.2K	1	
R3353	ERDS2TJ393	CARBON 1/4W 39K	1	
R3354	ERDS2TJ823	CARBON 1/4W 82K	1	
R3355	ERDS2TJ272	CARBON 1/4W 2.7K	1	
R3356	ERDS2TJ332	CARBON 1/4W 3.3K	1	
R3357	ERDS2TJ222	CARBON 1/4W 2.2K	1	
R3358	ERDS2TJ101	CARBON 1/4W 100	1	
R3359	ERDS2TJ332	CARBON 1/4W 3.3K	1	
R3360	ERDS2TJ182	CARBON 1/4W 1.8K	1	
R3361	ERDS2TJ103	CARBON 1/4W 10K	1	
R3362	ERDS2TJ122	CARBON 1/4W 1.2K	1	
R3364	ERDS2TJ163T	CARBON 1/4W 16K	1	
R3365	ERDS2TJ753	CARBON 1/4W 75K	1	
R3367	ERDS2TJ222	CARBON 1/4W 2.2K	1	
R3368	ERDS2TJ184	CARBON 1/4W 180K	1	
R3369	ERDS2TJ104	CARBON 1/4W 100K	1	
R3370	ERDS2TJ223	CARBON 1/4W 22K	1	
R3371	ERDS2TJ334	CARBON 1/4W 330K	1	
R3372	ERDS2TJ102	CARBON 1/4W 1K	1	
R3373	ERDS2TJ102	CARBON 1/4W 1K	1	
R3374	ERDS2TJ223	CARBON 1/4W 22K	1	
R3375	ERDS2TJ102	CARBON 1/4W 1K	1	
R3376	ERDS2TJ102	CARBON 1/4W 1K	1	
R3377	ERDS2TJ102	CARBON 1/4W 1K	1	
R3378	ERDS2TJ223	CARBON 1/4W 22K	1	
R3379	ERDS2TJ102	CARBON 1/4W 1K	1	
R3380	ERDS2TJ472	CARBON 1/4W 4.7K	1	
R3381	ERDS2TJ102	CARBON 1/4W 1K	1	
R3382	ERDS2TJ102	CARBON 1/4W 1K	1	
R3383	ERDS2TJ271	CARBON 1/4W 270	1	
R3384	ERDS2TJ104	CARBON 1/4W 100K	1	
R3385	ERDS2TJ104	CARBON 1/4W 100K	1	
R3387	ERDS2TJ102	CARBON 1/4W 1K	1	
R3388	ERDS2TJ102	CARBON 1/4W 1K	1	
R3389	ERDS2TJ223	CARBON 1/4W 22K	1	
R3390	ERDS2TJ822	CARBON 1/4W 8.2K	1	
R3391	ERDS2TJ222	CARBON 1/4W 2.2K	1	
R3392	ERDS2TJ103	CARBON 1/4W 10K	1	
R3393	ERDS2TJ102	CARBON 1/4W 1K	1	
R3394	ERDS2TJ102	CARBON 1/4W 1K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3395	ERDS2TJ103	CARBON 1/4W 10K	1	
R3396	ERDS2T1473	CARBON 1/4W 47K	1	
R3397	ERDS2T1473	CARBON 1/4W 47K	1	
R3398	ERDS2TJ224	CARBON 1/4W 220K	1	
R3399	ERDS2TJ101	CARBON 1/4W 100	1	
R3400	ERDS2TJ101	CARBON 1/4W 100	1	
R3401	ERDS2TJ122	CARBON 1/4W 1.2K	1	
R3402	ERDS2TJ101	CARBON 1/4W 100	1	
R3403	ERDS2TJ103	CARBON 1/4W 10K	1	
R3404	ERDS2TJ561	CARBON 1/4W 56K	1	
R3405	ERDS2TJ104	CARBON 1/4W 100K	1	
R3406	ERDS2TJ154	CARBON 1/4W 150K	1	
R3407	ERDS2TJ223	CARBON 1/4W 22K	1	
R3408	ERDS2T1473	CARBON 1/4W 47K	1	
R3409	ERDS2T1473	CARBON 1/4W 47K	1	
R3410	ERDS2TJ103	CARBON 1/4W 10K	1	
R3411	ERDS2TJ103	CARBON 1/4W 10K	1	
R3412	ERDS2TJ103	CARBON 1/4W 10K	1	
R3413	ERDS2TJ153	CARBON 1/4W 15K	1	
R3414	ERDS2TJ222	CARBON 1/4W 2.2K	1	
R3415	ERDS2TJ102	CARBON 1/4W 1K	1	
R3416	ERDS2TJ282	CARBON 1/4W 2.2	1	
R3417	ERDS2TJ282	CARBON 1/4W 2.2	1	
R3418	ERDS2TJ102	CARBON 1/4W 1K	1	
R3419	ERDS2TJ105	CARBON 1/4W 1000K	1	
R3420	ERDS2TJ103	CARBON 1/4W 10K	1	
R3421	ERDS2TJ184	CARBON 1/4W 180K	1	
R3422	ERDS2TJ563	CARBON 1/4W 56K	1	
VARIABLE				
VR3309	VR00000013	VARIABLE	1K	
VR3312	VR00000054	VARIABLE	50K	
WIP04179C PW AUDIO C.B.A.				

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4540	NC9A1G0470J	ELECTROLYTIC 16V 47P	1	
C4541	NC9A1G010J	ELECTROLYTIC 50V 3.3P	1	
C4542	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4543	NC9A1G010J	ELECTROLYTIC 16V 10P	1	
C4544	NC9A1G010J	ELECTROLYTIC 16V 10P	1	
C4545	BC0FL1G310B	CERAMIC 50V 330P	1	
C4546	BC0FL1G020I	MYLAR 50V 1000P	1	
C4547	NC9A1G032F	ELECTROLYTIC 25V 3.3P	1	
C4548	BC0FL1G30JC	CERAMIC 50V 33P	1	
C4549	BC0FL1G01JC	CERAMIC 50V 100P	1	
C4550	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4551	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4552	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4553	NC9A1G0470J	ELECTROLYTIC 6.3V 47P	1	
C4554	NC9A1G0330J	ELECTROLYTIC 10V 33P	1	
C4555	NC9A1G010J	ELECTROLYTIC 16V 10P	1	
C4556	BC0FL1G020I	MYLAR 50V 1000P	1	
C4557	NC9A1G032F	ELECTROLYTIC 25V 3.3P	1	
C4558	BC0FL1G310B	CERAMIC 50V 330P	1	
C4559	NC9A1G010J	ELECTROLYTIC 16V 10P	1	
C4560	BC0FL1G30JC	CERAMIC 50V 33P	1	
C4561	BC0FL1G01JC	CERAMIC 50V 100P	1	
C4562	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4563	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4564	NC9A1G0470J	ELECTROLYTIC 6.3V 47P	1	
C4565	BC0FL1G000C	CERAMIC 50V 10P	1	
C4566	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4567	NC9A1G0470J	ELECTROLYTIC 6.3V 47P	1	
C4572	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4573	BC0FL1G0330	ELECTROLYTIC 16V 33U	1	
C4574	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4575	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4576	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4577	BC0FL1G54JC	MYLAR 50V 0.15U	1	
C4578	BC0FL1G21JC	CERAMIC 50V 220P	1	
C4579	BC0FL1G470B	CERAMIC 50V 470P	1	
C4580	BC0FL1G010B	MYLAR 50V 1000P	1	
C4581	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4582	NC9A1G0470J	ELECTROLYTIC 6.3V 47P	1	
C4583	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4584	BC0FL1G010B	ELECTROLYTIC 50V 0.1U	1	
C4585	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4586	NC9A1G022	ELECTROLYTIC 50V 2.2U	1	
C4587	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4589	BC0FL1G04JC	MYLAR 50V 0.1U	1	
C4590	NC9A1G0470J	ELECTROLYTIC 25V 4.7U	1	
C4591	NC9A1G0470J	ELECTROLYTIC 25V 4.7P	1	
C4592	NC9A1G0470J	ELECTROLYTIC 25V 4.7P	1	
C4593	NC9A1G0470J	ELECTROLYTIC 25V 4.7P	1	
C4594	BC0FL1G0330	ELECTROLYTIC 16V 33U	1	
C4595	BC0FL1G0330	ELECTROLYTIC 16V 33U	1	
C4596	NC9A1G0330J	ELECTROLYTIC 35V 3.3P	1	
C4597	NC9A1G0330J	ELECTROLYTIC 35V 3.3P	1	
C4598	NC9A1G0330J	ELECTROLYTIC 25V 3.3U	1	
C4599	NC9A1G010B	ELECTROLYTIC 16V 10U	1	
C4600	NC9A1G0470J	ELECTROLYTIC 6.3V 47U	1	
C4601	NC9A1G010B	ELECTROLYTIC 16V 10U	1	
C4602	NC9A1G010B	ELECTROLYTIC 10V 100U	1	
C4603	NC9A1G010B	ELECTROLYTIC 10V 100U	1	
C4604	NC9A1G010B	ELECTROLYTIC 16V 10U	1	
C4605	NC9A1G0330J	ELECTROLYTIC 10V 33U	1	
C4606	NC9A1G0330J	ELECTROLYTIC 10V 33P	1	
C4607	NC9A1G010B	ELECTROLYTIC 50V 1U	1	
C4608	BC0FL1G022	ELECTROLYTIC 50V 2.2U	1	
C4651	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4652	NCY01C4739R1	SEMI CONDUCTOR 16V 0.047U	1	
C4653	NCY01C4739R1	SEMI CONDUCTOR 16V 0.047U	1	
C4654	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4655	NC9A1G010B	ELECTROLYTIC 16V 10U	1	
C4656	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4657	NCY01C4739R1	SEMI CONDUCTOR 16V 0.047U	1	
C4658	NCY01C4739R1	SEMI CONDUCTOR 16V 0.047U	1	
C4659	BC0FL1G032F	CERAMIC 50V 0.01U	1	
C4660	BC0FL1G310B	CERAMIC 50V 390P	1	
C4661	BC0FL1G310B	CERAMIC 50V 390P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4662	BC0FL1G233	ELECTROLYTIC 16V 33U	1	
C4663	BC0FL1G040B7	ELECTROLYTIC 25V 4.7U	1	
C4701	BC0FL1G0330J	ELECTROLYTIC 50V 0.33U	1	
C4702	BC0FL1G273JH	MYLAR 50V 0.027U	1	
C4703	BC0FL1G0300	ELECTROLYTIC 16V 10U	1	
C4704	BC0FL1G0330J	ELECTROLYTIC 50V 0.33U	1	
C4705	BC0FL1G273JH	MYLAR 50V 0.027U	1	
C4706	BC0FL1G0300	ELECTROLYTIC 16V 10U	1	
C4707	BC0FL1G333JH	MYLAR 50V 0.033U	1	
		DIODES		
D4501	MA165	DIODE	1	
D4502	MA1544K	DIODE	1	
D4503	MA165	DIODE	1	
D4504	MA1544A	DIODE	1	
D4505	MA1544A	DIODE	1	
D4506	MA165	DIODE	1	
D4508	MA165	DIODE	1	
D4509	MA165	DIODE	1	
D4511	MA156	DIODE	1	
D4512	MA165	DIODE	1	
D4651	MA165	DIODE	1	
		FILTERS		
FL4501	VLP0520	FILTER	1	
FL4503	VLP0520	FILTER	1	
FL4506	VLP0442	FILTER	1	
FL4651	VLP0443	FILTER	1	
FL4652	VLP0445	FILTER	1	
FL4653	VLP0441	FILTER	1	
		ICs		
IC4501	BA7721S	IC	1	
IC4502	BA7711S	IC	1	
IC4503	AN920K	IC	1	
IC4504	BA7056LS	IC	1	
IC4651	TA7302P	IC	1	
IC4652	TA7302P	IC	1	
		COILS		
L4501	VQL05P101K	COIL 100UH	1	
L4504	VQL05P221K	COIL 220UH	1	
L4505	VQL05P101K	COIL 100UH	1	
L4506	VQL05P101K	COIL 100UH	1	
L4651	VQL05P101K	COIL 100UH	1	
		CONNECTORS		
P4501	VJ31446	CONNECTOR (FEMALE)	1	
P4502	VJF1231T	CONNECTOR (MALE) 4P	1	
P4503	VJF1231T	CONNECTOR (MALE) 4P	1	
P4504	VJF1141	CONNECTOR (MALE) 2P	1	
		PACK PIN		
PK4701	VJ80160	PACK PIN	1	
		TRANSISTORS		
Q4501	2SD636	TRANSISTOR 1 (Q,R,S)	1	
Q4502	2SB641	TRANSISTOR 1 (Q,R,S)	1	
Q4503	2SD636	TRANSISTOR 1 (Q,R,S)	1	
Q4504	2SD1330	TRANSISTOR 1 (S,T)	1	
Q4505	2SD1330	TRANSISTOR 1 (S,T)	1	
Q4651	2SD636	TRANSISTOR 1 (Q,R,S)	1	
Q4652	2SD636	TRANSISTOR 1 (Q,R,S)	1	
Q4701	2SD636	TRANSISTOR 1	1	
Q4702	2SD636	TRANSISTOR 1	1	
		COMBINATION PARTS		

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q4501	UN1213	TRANSISTOR-RESISTOR	1	
Q4503	UN1213	TRANSISTOR-RESISTOR	1	
Q4507	UN1212	TRANSISTOR-RESISTOR	1	
Q4508	UN1211	TRANSISTOR-RESISTOR	1	
Q4509	UN1213	TRANSISTOR-RESISTOR	1	
Q4510	UN1112	TRANSISTOR-RESISTOR	1	
Q4511	UN1212	TRANSISTOR-RESISTOR	1	
Q4651	UN1112	TRANSISTOR-RESISTOR	1	
Q4652	UN1212	TRANSISTOR-RESISTOR	1	
		RESISTORS		
R4501	EROS2CKG1801	METAL OXIDE 1/4W 1.8K	1	
R4502	EROS2CKG1801	METAL OXIDE 1/4W 1.8K	1	
R4503	ERUS2TJ103	CARBON 1/4W 10K	1	
R4504	EROS2CKG2201	METAL OXIDE 1/4W 2.2K	1	
R4505	ERUS2TJ225	CARBON 1/4W 2.2K	1	
R4506	ERUS2TJ333	CARBON 1/4W 33K	1	
R4507	EROS2CKG2001	METAL OXIDE 1/4W 2K	1	
R4508	EROS2CKG3601	METAL OXIDE 1/4W 3.6K	1	
R4509	EROS2CKG1002	METAL OXIDE 1/4W 10K	1	
R4510	EROS2CKG1101	METAL OXIDE 1/4W 1.1K	1	
R4511	ERUS2TJ822	CARBON 1/4W 8.2K	1	
R4512	EROS2CKG3901	METAL OXIDE 1/4W 3.9K	1	
R4513	ERUS2TJ122	CARBON 1/4W 1.2K	1	
R4514	EROS2CKG1201	METAL OXIDE 1/4W 1.2K	1	
R4515	ERUS2TJ103	CARBON 1/4W 10K	1	
R4516	EROS2CKG3302	METAL OXIDE 1/4W 33K	1	
R4517	ERUS2TJ223	CARBON 1/4W 22K	1	
R4518	ERUS2TJ101	CARBON 1/4W 100	1	
R4519	EROS2CKG2201	METAL OXIDE 1/4W 2.2K	1	
R4520	ERUS2TJ333	CARBON 1/4W 33K	1	
R4521	ERUS2TJ225	CARBON 1/4W 2.2K	1	
R4522	EROS2CKG1801	METAL OXIDE 1/4W 1.8K	1	
R4523	EROS2CKG1801	METAL OXIDE 1/4W 1.8K	1	
R4524	EROS2CKG2001	METAL OXIDE 1/4W 2K	1	
R4525	EROS2CKG3601	METAL OXIDE 1/4W 3.6K	1	
R4526	EROS2CKG1002	METAL OXIDE 1/4W 10K	1	
R4527	EROS2CKG1101	METAL OXIDE 1/4W 1.1K	1	
R4528	ERUS2TJ822	CARBON 1/4W 8.2K	1	
R4529	ERUS2TJ122	CARBON 1/4W 1.2K	1	
R4530	EROS2CKG3901	METAL OXIDE 1/4W 3.9K	1	
R4531	ERUS2TJ103	CARBON 1/4W 10K	1	
R4532	EROS2CKG1201	METAL OXIDE 1/4W 1.2K	1	
R4533	EROS2CKG3302	METAL OXIDE 1/4W 33K	1	
R4534	ERUS2TJ104	CARBON 1/4W 100K	1	
R4535	ERUS2TJ103	CARBON 1/4W 10K	1	
R4536	ERUS2TJ182	CARBON 1/4W 1.8K	1	
R4537	EROS2CKG2402	METAL OXIDE 1/4W 24K	1	
R4538	ERUS2TJ272	CARBON 1/4W 2.7K	1	
R4539	EROS2CKG5601	METAL OXIDE 1/4W 5.6K	1	
R4540	ERUS2TJ182	CARBON 1/4W 1.8K	1	
R4541	EROS2CKG2402	METAL OXIDE 1/4W 24K	1	
R4542	ERUS2TJ272	CARBON 1/4W 2.7K	1	
R4543	EROS2CKG7501	METAL OXIDE 1/4W 7.5K	1	
R4544	ERUS2TJ332	CARBON 1/4W 3.3K	1	
R4545	ERUS2TJ182	CARBON 1/4W 1.8K	1	
R4555	ERUS2TJ103	CARBON 1/4W 10K	1	
R4556	ERUS2TJ472	CARBON 1/4W 4.7K	1	
R4558	ERUS2TJ472	CARBON 1/4W 4.7K	1	
R4559	ERUS2TJ102	CARBON 1/4W 1K	1	
R4561	ERUS2TJ391	CARBON 1/4W 390	1	
R4562	ERUS2TJ332	CARBON 1/4W 3.3K	1	
R4563	ERUS2TJ273	CARBON 1/4W 27K	1	
R4564	ERUS2TJ222	CARBON 1/4W 2.2K	1	
R4565	ERUS2TJ473	CARBON 1/4W 47K	1	
R4566	ERUS2TJ102	CARBON 1/4W 1K	1	
R4569	ERUS2TJ182	CARBON 1/4W 1.8K	1	
R4570	ERUS2TJ182	CARBON 1/4W 1.8K	1	
R4572	ERUS2TJ124	CARBON 1/4W 120K	1	
R4573	ERUS2TJ101	CARBON 1/4W 100	1	
R4574	ERUS2TJ124	CARBON 1/4W 120K	1	
R4575	ERUS2TJ101	CARBON 1/4W 100	1	
R4576	ERUS2TJ660	CARBON 1/4W 68	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4577	ERUS2TJ272	CARBON 1/4W 2.7K	1	
R4578	ERUS2TJ103	CARBON 1/4W 10K	1	
R4579	ERUS2TJ272	CARBON 1/4W 2.7K	1	
R4580	ERUS2TJ103	CARBON 1/4W 10K	1	
R4581	ERUS2TJ680	CARBON 1/4W 68	1	
R4582	ERUS2TJ680	CARBON 1/4W 68	1	
R4583	ERUS2TJ103	CARBON 1/4W 10K	1	
R4584	ERUS2TJ823	CARBON 1/4W 82K	1	
R4585	ERUS2TJ102	CARBON 1/4W 1K	1	
R4586	ERUS2TJ473	CARBON 1/4W 47K	1	
R4587	ERUS2TJ472	CARBON 1/4W 4.7K	1	
R4588	ERUS2TJ273	CARBON 1/4W 27K	1	
R4589	EROS2CKG4701	METAL OXIDE 1/4W 4.7K	1	
R4590	EROS2CKG4701	METAL OXIDE 1/4W 4.7K	1	
R4591	ERUS2TJ182	CARBON 1/4W 1.8K	1	
R4592	ERUS2TJ562	CARBON 1/4W 5.6K	1	
R4593	ERUS2TJ472	CARBON 1/4W 4.7K	1	
R4594	EROS2CKG3200	METAL OXIDE 1/4W 820	1	
R4595	EROS2CKG3200	METAL OXIDE 1/4W 820	1	
R4596	ERUS2TJ682	CARBON 1/4W 6.8K	1	
R4597	ERUS2TJ682	CARBON 1/4W 6.8K	1	
R4598	ERUS2TJ473	CARBON 1/4W 47K	1	
R4599	ERUS2TJ103	CARBON 1/4W 10K	1	
R4600	ERUS2TJ102	CARBON 1/4W 1K	1	
R4601	ERUS2TJ102	CARBON 1/4W 1K	1	
R4602	ERUS2TJ102	CARBON 1/4W 1K	1	
R4603	ERUS2TJ222	CARBON 1/4W 2.2K	1	
R4604	ERUS2TJ101	CARBON 1/4W 100	1	
R4605	ERUS2TJ222	CARBON 1/4W 2.2K	1	
R4606	ERUS2TJ391	CARBON 1/4W 39K	1	
R4607	ERUS2TJ105	CARBON 1/4W 1000K	1	
R4608	ERUS2TJ222	CARBON 1/4W 2.2K	1	
R4609	ERUS2TJ105	CARBON 1/4W 1000K	1	
R4610	ERUS2TJ222	CARBON 1/4W 2.2K	1	
R4611	ERUS2TJ123	CARBON 1/4W 12K	1	
R4612	ERUS2TJ124	CARBON 1/4W 120K	1	
R4613	ERUS2TJ123	CARBON 1/4W 12K	1	
R4614	ERUS2TJ124	CARBON 1/4W 120K	1	
R4615	ERUS2TJ822	CARBON 1/4W 8.2K	1	
R4670	ERUSB20J102		1	
R4671	ERUSB20J102		1	
R4701	ERUS2TJ184	CARBON 1/4W 180K	1	
R4702	ERUS2TJ104	CARBON 1/4W 100K	1	
R4703	ERUS2TJ182	CARBON 1/4W 1.8K	1	
R4704	ERUS2TJ182	CARBON 1/4W 1.8K	1	
R4705	ERUS2TJ271	CARBON 1/4W 270	1	
R4706	ERUS2TJ184	CARBON 1/4W 180K	1	
R4707	ERUS2TJ104	CARBON 1/4W 100K	1	
R4708	ERUS2TJ182	CARBON 1/4W 1.8K	1	
R4709	ERUS2TJ182	CARBON 1/4W 1.8K	1	
R4710	ERUS2TJ271	CARBON 1/4W 270	1	
R4711	ERUS2TJ122	CARBON 1/4W 1.2K	1	
R4712	ERUS2TJ122	CARBON 1/4W 1.2K	1	
R4713	ERUS2TJ333	CARBON 1/4W 33K	1	
R4714	ERUS2TJ221	CARBON 1/4W 220	1	
		VARIBLE RESISTORS		
VR4501	EVW38C00823	VARIBLE 2K	1	
VR4502	EVW38A00814	VARIBLE 10K	1	
VR4503	VRW0020	VARIBLE RESISTOR	1	
VR4504	EVW38A00814	VARIBLE 10K	1	
VR4505	VRW0024	VARIBLE RESISTOR	1	
VR4507	EVW38A00814	VARIBLE 10K	1	
VR4508	EVW38A00814	VARIBLE 10K	1	
VR4509	EVW38C00823	VARIBLE 2K	1	
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Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C502	BCUQJH820JCN	CHIP 50V 82P	1	
C503	BCUQJH810JCN	CHIP 50V 180P	1	
C504	BCUQJH30JCN	CHIP 50V 33P	1	
C505	BCUQJH032PW	CHIP 50V 0.01U	1	
C506	BCUQJH4732PW	CHIP 25V 0.047U	1	
C507	BCUQJH0100	ELECTROLYTIC 16V 10U	1	
C508	BCUQJH1042PW	CHIP 25V 0.1U	1	
C509	BCUQJH1032PW	CHIP 50V 0.01U	1	
C510	BCUQJH1042PW	CHIP 25V 0.1U	1	
C511	BCUQJH1042PW	CHIP 25V 0.1U	1	
C512	BCUQJH1032PW	CHIP 50V 0.01U	1	
C513	BCUQJH8220	ELECTROLYTIC 6.3V 22U	1	
C514	VCYDCL040W1	SEMI CONDUCTOR 16V 0.1U	1	
C515	BCUQJH1020W	CHIP 50V 1000P	1	
C516	BCUQJH150JCN	CHIP 50V 15P	1	
C517	BCUQJH032PW	CHIP 50V 0.01U	1	
C518	BCUQJH0100	ELECTROLYTIC 16V 10U	1	
C519	BCUQJH0100	ELECTROLYTIC 16V 10U	1	
C520	BCUQJH150JCN	CHIP 50V 15P	1	
C521	BCUQJH1032PW	CHIP 50V 0.01U	1	
C522	BCUQJH1032PW	CHIP 50V 0.01U	1	
C523	BCUQJH150JCN	CHIP 50V 15P	1	
C524	BCUQJH0100	ELECTROLYTIC 16V 10U	1	
C525	BCUQJH1020W	CHIP 50V 1000P	1	
C527	BCUQJH1020W	CHIP 50V 1000P	1	
C528	BCUQJH1032PW	CHIP 50V 0.01U	1	
C529	BCUQJH1032PW	CHIP 50V 0.01U	1	
C530	BCUQJH4732PW	CHIP 25V 0.047U	1	
C531	BCUQJH6470	ELECTROLYTIC 6.3V 47U	1	
C533	BCUQJH560JCN	CHIP 50V 56P	1	
C534	BCUQJH8010	ELECTROLYTIC 50V 10U	1	
C536	VCYDCL040W1	SEMI CONDUCTOR 16V 0.1U	1	
C537	BCUQJH150JCN	CHIP 50V 15P	1	
C538	BCUQJH0100	ELECTROLYTIC 16V 10U	1	
C539	BCUQJH1032PW	CHIP 50V 0.01U	1	
C540	BCUQJH1032PW	CHIP 50V 0.01U	1	
C551	BCUQJH1032PW	CHIP 50V 0.01U	1	
C552	BCUQJH0100	ELECTROLYTIC 16V 10U	1	
C553	BCUQJH4732PW	CHIP 25V 0.047U	1	
C554	BCUQJH391JN	CHIP 50V 390P	1	
C555	BCUQJH8022	ELECTROLYTIC 50V 0.22U	1	
C556	BCUQJH151JCN	CHIP 50V 150P	1	
C557	BCUQJH151JCN	CHIP 50V 150P	1	
C558	BCUQJH8022	ELECTROLYTIC 50V 0.22U	1	
C559	BCUQJH1220W	CHIP 50V 1200P	1	
C560	BCUQJH1220W	CHIP 50V 1200P	1	
C561	BCUQJH30JCN	ELECTROLYTIC 6.3V 33U	1	
C562	BCUQJH1042PW	CHIP 25V 0.1U	1	
C563	BCUQJH1032PW	CHIP 50V 0.01U	1	
		IC5		
IC501	AN3224K	IC	1	
IC502	AN33115	IC	1	
IC551	UPC1531HA	IC	1	
		COILS		
L501	VLQEL05P101K	COIL 1000H	1	
L502	VLQEL05P820K	COIL 82UH	1	
L503	VLQEL05P151K	COIL 1500H	1	
L505	VLQEL05P101K	COIL 1000H	1	
L507	VLQEL05P270K	COIL 27UH	1	
L551	VLQEL05P101K	COIL 1000H	1	
L552	VLQEL05P101K	COIL 1000H	1	
L580	VLQ0211K2R2	COIL	1	
L581	VLQ0211K2R2	COIL	1	
		CONNECTORS		
P002	WJ51927	CONNECTOR (FEMALE)	1	
P501	WJ1248T	CONNECTOR (MALE) 8P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
P502	VJPI 2367	CONNECTOR (WALE)	9P	1
		TRANSISTORS		
Q501	2SB709	TRANSISTOR CHIP	1	(Q.R.5)
Q551	2SB643	TRANSISTOR	1	
Q552	2SD1306	TRANSISTOR	1	
		COMBINATION PARTS		
QR551	2SD1777C1	TRANSISTOR	1	
QR552	2SD1777C1	TRANSISTOR	1	
		RESISTORS		
R501	ELJ6QWJ561	CHIP 1/16W	560	1
R502	ELJ6QWJ102	CHIP 1/16W	1K	1
R503	ELJ6QWJ222	CHIP 1/16W	22	1
R504	ELJ6QWJ331	CHIP 1/16W	330	1
R505	ELJ6QWJ102	CHIP 1/16W	1K	1
R506	ELJ6QWJ471	CHIP 1/16W	470	1
R508	ELJ6QWJ100	CHIP 1/16W	10	1
R509	ELJ6QWJ100	CHIP 1/16W	10	1
R510	ELJ6QWJ561	CHIP 1/16W	560	1
R511	ELJ6QWJ821	CHIP 1/16W	820	1
R512	ELJ6QWJ821	CHIP 1/16W	820	1
R515	ELJ6QWJ102	CHIP 1/16W	1K	1
R516	ELJ6QWJ152	CHIP 1/16W	1.5K	1
R517	ELJ6QWJ391	CHIP 1/16W	390	1
R519	ELJ6QWJ100	CHIP 1/16W	10	1
R520	ELJ6QWJ100	CHIP 1/16W	10	1
R522	ELJ6QWJ561	CHIP 1/16W	560	1
R523	ELJ6QWJ223	CHIP 1/16W	22K	1
R524	ELJ6QWJ334	CHIP 1/16W	330K	1
R525	ELJ6QWJ223	CHIP 1/16W	22K	1
R551	ELJ6QWJ101	CHIP 1/16W	100	1
R552	ELJ6QWJ101	CHIP 1/16W	100	1
R553	ELJ6QWJ153	CHIP 1/16W	15K	1
R554	ELJ6QWJ393	CHIP 1/16W	39K	1
R555	ELJ6QWJ393	CHIP 1/16W	39K	1
R556	ELJ6QWJ153	CHIP 1/16W	15K	1
R557	ELJ6QWJ332	CHIP 1/16W	3.3K	1
R558	ELJ6QWJ181	CHIP 1/16W	180	1
R559	ELJ6QWJ181	CHIP 1/16W	180	1
R560	ELJ6QWJ220	CHIP 1/16W	22	1
R561	ELJ6QWJ271	CHIP 1/16W	270	1
R562	ELJ6QWJ100	CHIP 1/16W	10	1
R563	ELJ6QWJ100	CHIP 1/16W	10	1
R564	ELJ6QWJ153	CHIP 1/16W	15K	1
R565	ELJ6QWJ103	CHIP 1/16W	10K	1
R566	ELJ6QWJ103	CHIP 1/16W	10K	1
R580	ELJ6QWJ471	CHIP 1/16W	470	1
R581	ELJ6QWJ471	CHIP 1/16W	470	1
R582	ELJ6QWJ471	CHIP 1/16W	470	1
		VARIABLE RESISTORS		
VR501	EVND1AN0823	VARIABLE	2K	1
VR502	EVND1AN0813	VARIABLE	1K	1
		MISCELLANEOUS		
	VSC1832	SHIELD CASE (TOP)	1	
	VSC1833	SHIELD CASE (BOTTOM)	1	
	VSC1834	SHIELD CASE (MAIN)	1	
	■ VEP06400A	OPERATION C.B.A.		NV-D80EC
	■ VEP06400B			NV-D80EV/B

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
		CAPACITORS		
C5501	HCQB1K223KH	MYLAR 50V 0.022U	1	1W-DB08C
C5502	HCQB1K223KH	MYLAR 50V 0.022U	1	1W-DB08C
		DIODES		
DE501	1N4148PRL	LED	1	
DE502	1N3638PFWT	LED	1	
DE503	1N1165	DIODE	1	
DE504	1N1165	DIODE	1	
DE505	1N1165	DIODE	1	
DE506	1N1165	DIODE	1	
DE507	1N1165	DIODE	1	1W-DB08C
		COTLS		
LE501	VLQBL05P121K	COTL 120UH	1	1W-DB08C
LE502	VLQBL05P121K	COTL 120UH	1	1W-DB08C
		CONNECTORS		
PE501	NUJ1250T	CONNECTOR (W/L) 10P	1	
PE502	NUJ1929T	CONNECTOR	1	
PE503	NUJ1244T	CONNECTOR (W/L) 4P	1	
PE504	NUJ1231T	CONNECTOR (W/L) 4P	1	
PE505	NUJ1235T	CONNECTOR (W/L) 8P	1	
PE506	NUJ1247T	CONNECTOR (W/L) 2P	1	
		COMBINATION PARTS		
QW501	1N1123	TRANSISTOR-RESISTOR	1	
QW502	1N1113	TRANSISTOR-RESISTOR	1	
		RESISTORS		
RE501	BRD52TJ331	CARBON 1/4W 330	1	
RE504	BRD52TJ102	CARBON 1/4W 1K	1	
RE507	BRD52TJ222	CARBON 1/4W 2.2K	1	1W-DB08C
RE508	BRD52TJ223	CARBON 1/4W 22K	1	
RE509	BRD52TJ562	CARBON 1/4W 5.6K	1	
		SWITCHES		
SW501	EVQ06307K	SWITCH	1	
SW502	EVQ06307K	SWITCH	1	
SW503	EVQ06307K	SWITCH	1	
SW504	ESD14314	SWITCH	1	
SW506	ESD14314	SWITCH	1	
SW507	ESD14316	SWITCH	1	
SW508	ESD14314	SWITCH	1	
SW510	ESD14316	SWITCH	1	
SW511	ESD14316	SWITCH	1	
SW512	ESD14314	SWITCH	1	
		VARIABLE RESISTORS		
VR501	EVUFAED04B15	VARIABLE 100K	1	
VR502	EVUFAED04B15	VARIABLE 100K	1	
VR503	EVUJ16ED04B24	VARIABLE RESISTOR 20K	1	
VR504	EVJGAE05C23	VARIABLE RESISTOR 2K	1	
		MISCELLANEOUS		
	KL04	LED SPACER	1	
	VGU2473	SW SELECT KNOB	1	
	VGU2707	EDIT KNOB	1	
	VMD0504	LED HOLDER	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	■ VEP07381A	FREQUENCY SYNTHESIZER TUNER		NV-D80EG
	■ VEP07381B	& VPS C.B.A.		NV-D80EV
		CONNECTORS		
8F7701	NJPI257	CONNECTOR	1	
8F7703	NJPI257	CONNECTOR	1	
8F7704	NJPI258	CONNECTOR (MALE)	1	
8F7801	NJPI258	CONNECTOR (MALE)	1	
		CAPACITORS		
C7701	BOCF1H220JC	CERAMIC 50V 22P	1	
C7702	BOCF1H150JC	CERAMIC 50V 15P	1	
C7703	BOCF1H1032F	CERAMIC 50V 0.01U	1	
C7704	BOCF1H1032F	CERAMIC 50V 0.01U	1	
C7705	BOCF1H1032F	CERAMIC 50V 0.01U	1	
C7706	BOQ1H104JZ	MYLAR 50V 0.1U	1	
C7707	BOQ0H1K220	ELECTROLYTIC 6.3V 22U	1	
C7708	BOQ1H104JZ	MYLAR 50V 0.1U	1	
C7709	BOQ1H104JZ	MYLAR 50V 0.1U	1	
C7710	BOA1H1K00	ELECTROLYTIC 35V 10P	1	
C7711	BOCF1H1032F	CERAMIC 50V 0.01U	1	
C7720	BOQ1H184JZ	MYLAR 50V 0.18U	1	
C7721	BOQ1H1564JZ	MYLAR 50V 0.56U	1	
C7722	BOQ1H103JH	MYLAR 50V 0.01U	1	
C7723	BOCF1H1032F	CERAMIC 50V 0.01U	1	
C7801	BOA1H1K220	ELECTROLYTIC 16V 22U	1	
C7802	BOQ1H1223JH	MYLAR 50V 0.022U	1	
C7803	BOQ1H1563JZ	MYLAR 50V 0.068U	1	
C7804	BOA1H1K047	ELECTROLYTIC 50V 0.47U	1	
C7805	BOCF1H150JC	CERAMIC 50V 15P	1	
C7806	BOQ1H102JH	MYLAR 50V 1000P	1	
C7807	BOCF1H471K8	CERAMIC 50V 470P	1	
C7808	BOQ1H1223JH	MYLAR 50V 0.022U	1	
C7809	BOCF1H271J8	CERAMIC 50V 270P	1	
C7810	BOCF1H101JC	CERAMIC 50V 100P	1	
C7811	BOCF1H180JC	CERAMIC 50V 18P	1	
C7812	BOCF1H820JC	CERAMIC 50V 82P	1	
C7814	BOCF1H1029K	CERAMIC 50V 1000P	1	
C7815	ACV91C1049R1	SEMI CONDUCTOR 16V 0.1U	1	
C7816	BOA1H1K487	ELECTROLYTIC 25V 4.7U	1	
C7818	BOA1H1K0100	ELECTROLYTIC 16V 10U	1	
C7819	BOCF1H101JC	CERAMIC 50V 100P	1	
C7820	BOCF1H101JC	CERAMIC 50V 100P	1	
C7821	BOQ1H1272JH	MYLAR 50V 2700P	1	
C7851	BOQ1H104JZ	MYLAR 50V 0.1U	1	
C7852	BOA1H1K101	ELECTROLYTIC 10V 100U	1	
C7853	BOCF1H330JC	CERAMIC 50V 33P	1	
C7854	BOCF1H330JC	CERAMIC 50V 33P	1	
C7855	BOA1H1K010	ELECTROLYTIC 50V 1U	1	
C7856	BOA1H1K010	ELECTROLYTIC 50V 1U	1	
		DIODES		
D7701	MA165	DIODE	1	NV-D80EV
D7703	MA165	DIODE	1	
D7704	MA165	DIODE	1	
D7705	MA165	DIODE	1	
D7706	MA165	DIODE	1	
D7707	MA165	DIODE	1	
D7708	MA165	DIODE	1	
D7710	MA29WB	DIODE	1	
D7711	LN28MPVT	LED	1	
D7721	MA4300M	DIODE	1	(H)
D7851	MA165	DIODE	1	
		ICs		

[illegible]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C781	BC0C1839JCN	CHIP 50V 39P	1	
C782	BC0C180600C	CERAMIC 50V 6P	1	
C7651	BC0A1CK100	ELECTROLYTIC 16V 10U	1	
C7652	BC0A1CK0330	ELECTROLYTIC 16V 33U	1	
C7653	BC0B1K392JH	MYLAR 50V 3900P	1	
C7654	BC0B1K103JH	MYLAR 50V 0.01U	1	
C7655	BC0B1K8010	ELECTROLYTIC 50V 1U	1	
C7656	BC0B1K8010	ELECTROLYTIC 50V 1U	1	
C7657	BC0P1K103ZF	CERAMIC 50V 0.01U	1	
C7658	BC0P1562Z2	MYLAR 100V 5600P	1	
C7659	BC0B1K272JH	MYLAR 50V 2700P	1	
		DIODES		
D710	MA3100L	DIODE	1	
D712	MA29W	DIODE	1	
		ICs		
IC701	MS1366SP	IC	1	
IC7651	AMS421	IC	1	
		COILS		
L702	VLQEL05P680K	COIL 68UH	1	
L711	ELQ7K280	COIL	1	
L712	ELQ7K820	COIL	1	
L713	ELQ7K560	COIL	1	
L714	ELQ7K280	COIL	1	
L715	VLQ0213P680T	COIL	1	
L717	VLQEL05P680K	COIL 68UH	1	
L718	VLQEL05P680K	COIL 68UH	1	
L719	VLQEL05P120K	COIL 12UH	1	
L781	VLQEL05P330K	COIL 33UH	1	
		PACK PINS		
PK701	MYJ0190	PACK PIN	1	
PK702	MYJ0190	PACK PIN	1	
		TRANSISTORS		
Q703	2SD601	TRANSISTOR CHIP	1 (S,T)	
Q710	2SC2377	TRANSISTOR	1 (C,D)	
Q712	2SD638	TRANSISTOR	1	
Q713	2SD1328	TRANSISTOR CHIP	1 (S,T)	
Q714	2SD601	TRANSISTOR CHIP	1	
Q761	2SD601	TRANSISTOR CHIP	1	
		COMBINATION PARTS		
QR701	UN2213	TRANSISTOR-RESISTOR	1	
QR702	UN2213	TRANSISTOR-RESISTOR	1	
QR710	UN2212	TRANSISTOR-RESISTOR	1	
QR713	UN2211	TRANSISTOR-RESISTOR	1	
		RESISTORS		
R707	ELJ6GEYJ103	CHIP 1/16W 10K	1	
R712	ELJ6GEYJ682	CHIP 1/16W 6.8K	1	
R713	ELJ6GEYJ681	CHIP 1/16W 680	1	
R714	ELJ2PCG330	CARBON 2W 33	1 (C)	
R715	ELJ6GEYJ271	CHIP 1/16W 270	1	
		MISCELLANEOUS		
	VSC1788	SHIELD CASE (TOP)	1	
	VSC1789	SHIELD CASE (MAIN)	1	
	VSC1808	SHIELD CASE (BOTTOM)	1	
		TRANSFORMERS		
T703	E1V5BC005A	TRANSFORMER	1	
T704	E1V5BC007A	TRANSFORMER	1	
T711	E1S5BC008A	TRANSFORMER	1	
		VARIABLE RESISTORS		
VR701	EWB4A00B23	VARIABLE RESISTOR	2K	1
VR741	EW38CA00B14	VARIABLE	10K	1
VR751	EW38CA00B53	VARIABLE	5K	1
VR7660	EW38CA00B23	VARIABLE	2K	1
		FILTERS		
X710	EPC939MS2	FILTER	1	
X711	EPC5GROM5	FILTER	1	
X712	EPC5GROM5	FILTER	1	

[illegible]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C06	ECALAK4701	ELECTROLYTIC 10V 47U	1	
C07	ECUCLH330JCH	CHIP 50V 33P	1	
C08	ECUCLH330JCH	CHIP 50V 33P	1	
C09	ECUCLH032PW	CHIP 50V 0.01U	1	
		DIODES		
D01	PA151MK	DIODE	1	
D02	PA151MK	DIODE	1	
D03	PA151MK	DIODE	1	
D04	PA151MK	DIODE	1	
D05	PA153	DIODE	1	
D06	SE303AY	DIODE	1	
		ICS		
IC01	UPD49HC88022	IC 1 OR UPD49HC87722	1	
IC02	UPC32402	IC	1	
IC03	AMP78102AA	IC	1	
		COILS		
L01	ELT3K014C	COIL 1 NV-D80B	1	
L01	ELT3K017A	COIL 1 NV-D80B/2V	1	
		CONNECTOR		
P01	VJP1229T	CONNECTOR(MALE) 2P	1	
		TRANSISTORS		
Q01	25B710	TRANSISTOR CHIP 1 (Q,R,S)	1	
Q02	25B710	TRANSISTOR CHIP 1 (Q,R,S)	1	
Q03	25B709	TRANSISTOR CHIP 1 (Q,R,S)	1	
Q04	25D601	TRANSISTOR CHIP 1 (Q,R,S)	1	
		RESISTORS		
R01	BRJ6GRJ470	CHIP 1/16W 47	1	
R02	BRJ6GRJ102	CHIP 1/16W 1K	1	
R03	BRJ6GRJ123	CHIP 1/16W 12K	1	
R04	BRJ6GRJ332	CHIP 1/16W 3.3K	1	
R05	BRJ6GRJ302	CHIP 1/16W 2K	1	
R06	BRJ6GRJ344	CHIP 1/16W 240K	1	
R07	BRJ6GRJ162	CHIP 1/16W 1.6K	1	
R10	BRJ6GRJ106	CHIP 1/16W 10K	1	
R11	BRJ6GRJ105	CHIP 1/16W 1M	1	
R12	BRJ6GRJ106	CHIP 1/16W 10K	1	
R13	BRJ6GRJ1361	CHIP 1/16W 360	1	
R14	BRJ6GRJ682	CHIP 1/16W 6.8K	1	
R15	BRJ6GRJ332	CHIP 1/16W 3.3K	2	
R16	BRJ6GRJ682	CHIP 1/16W 6.8K	1	
R17	BRJ6GRJ682	CHIP 1/16W 6.8K	1	
R18	BRD2EJ088	CARBON 1/4W 6.8	1	
R20	BRJ6GRJ104	CHIP 1/16W 100K	1	
R23	BRJ6GRJ682	CHIP 1/16W 6.8K	1	
R24	BRJ6GRJ102	CHIP 1/16W 1K	1	
R28	BRJ6GRJ000	CHIP 0	1	
		SWITCHES		
SW01	V50211	SWITCH	1	
SW02	V50221	SWITCH	1	
		CRYSTAL OSCILLATOR		
X01	V500199	CRYSTAL OSCILLATOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
X02	V500536	Buzzer	1 OR V500552	
		SENSOR UNIT		
PC1	V500533	SENSOR UNIT	1 OR V500546	
	VEPOUJ12A	HEADPHONE C.B.A.		NV-D80B
	VEPOUJ12B			NV-D80B/8
		CAPACITORS		
C6301	ECALAKS330	ELECTROLYTIC 10V 33P	1	
C6302	ECQBIH1030H	MYLAR 50V 0.01U	1	
C6303	ECALAKS330	ELECTROLYTIC 16V 33P	1	
C6305	ECQBIH1030H	MYLAR 50V 0.01U	1 NV-D80B	
C6307	ECQBIH1030H	MYLAR 50V 0.01U	1 NV-D80B	
		COILS		
L6301	VLQEL05M471K	COIL 470UH	1	
L6303	VLQEL05M471K	COIL 470UH	1	
		CONNECTORS		
P6505	VJ51741T	CONNECTORS 8P	1	
		IC		
IC6301	VCM0172	IC	1	
		MISCELLANEOUS		
	VJ10096	HEADPHONE JACK	1	
	VJ10138	MIC JACK	1	
	VJ10427	MIC JACK HOLDER	2	
		RF CONVERTER & ANTENNA		NV-D80B(1)
	EW07954	BOOSTER UNIT		NV-D80B(1)
	EW07952			NV-D80B(1)
		INTEGRATED CIRCUIT		
IC1	LA7051	IC	1	
		TRANSISTORS		
Q1	25C2570A	TRANSISTOR	1 OR 25C3355	
Q2	25C3130	TRANSISTOR	1	
		DIODES		
D1	PA1075	DIODE	1	
D2	BSM768		1	
D3	PA166		1	
D4	PA166		1 NV-D80B	
D5	PA166		1	
		NOTE:		
		THE OTHER PARTS FOR		
		RF CONVERTER & ANTENNA		
		BOOSTER UNIT ARE		

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
		NOT AVAILABLE AS SPARE PARTS.		
		RESISTOR		
R2901	ERX12ANJR68	METAL OXIDE 1/4W 0.68	1	
	VEP66008A	PROGRAMMABLE REMOTE CONTROL UNIT C.B.A.		
		CONNECTORS		
P2901	VJP1232		1	
P2902	VJP1927		1	
		CAPACITORS		
C1	ECDAOKS101	ELECTROLYTIC 4V 100U	1	
C2	ECQPH121K8	CERAMIC 50V 120P	1	
C3	ECQPH121K8	CERAMIC 50V 120P	1	
C4	ECQBIH22K2	MYLAR 50V 2200P	1	
		DIODES		
D1	SE303AY	DIODE	1	
D2	PA154MK	DIODE	1	
D3	PA154MK	DIODE	1	
D4	PA154MK	DIODE	1	
D5	PA165	DIODE	1	
D6	PA154MK	DIODE	1	
D7	PA154MK	DIODE	1	
D8	PA154MK	DIODE	1	
		CONNECTORS		
P1504	VJP1939		12P 1	
P1505	VJP1242T		2P 1	
IC1	W6011D	IC	1	
		INTEGRATED CIRCUIT		
		COMBINATION PART (TRANSISTOR & RESISTORS)		
QR1	AN1231	TRANSISTOR - RESISTORS	1	
QR2	D1A1448A	TRANSISTOR - RESISTORS	1	
		RESISTOR		
R1	ERD62TJ180	CARBON 1/4W 1.0	1	
R2	ERD62TJ393	CARBON 1/4W 39K	1	
		CRYSTAL OSCILLATOR		
	V500201	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VJ10253	ELECTRODE (+)		
	VJ10254	ELECTRODE (-)		
	VEP00822A	CYLINDER DRIVE C.B.A.		
		CAPACITORS		
C2901	ECALVSK22	ELECTROLYTIC 35V 2.2U	1	
C2902	ECALVSK22	ELECTROLYTIC 35V 2.2U	1	
C2903	ECALVSK22	ELECTROLYTIC 35V 2.2U	1	
C2904	ECALVSK22	ELECTROLYTIC 50V 22U	1	
C2905	ECALVSK22	ELECTROLYTIC 50V 22U	1	
C2906	ECALVSK22	ELECTROLYTIC 50V 22U	1	
C2907	ECALVSK22	ELECTROLYTIC 50V 33U	1	
C2908	ECQV18473	MYLAR 50V 0.047U	1	
C2909	ECQV18473	MYLAR 50V 0.1U	1	
C2910	ECDAOKS100	ELECTROLYTIC 16V 10U	1	
		INTEGRATED CIRCUIT		
IC2901	AN3812K	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
		RESISTOR		
R2901	ERX12ANJR68	METAL OXIDE 1/4W 0.68	1	
		CONNECTORS		
P2901	VJP1232		1	
P2902	VJP1927		1	
		MISCELLANEOUS		
	VSC1843	SINK HEAT	1	
	W66884	RAIN HOLDER	1	
		MECHANISM CONNECTION C.B.A. CONNECTORS		
		CONNECTORS		
P1504	VJP1939		12P 1	
P1505	VJP1242T		2P 1	
		RESISTORS		
R1501	ERD62TJ223	CARBON 1/4W 22K	1	
	VEP00831A	HEEL SENSOR C.B.A.		
		PHOTO TRANSISTOR		
		INTEGRATED CIRCUITS		
IC1501	ON2170		1	
		CONNECTOR		
		CONNECTORS		
P1506	VJP1242		2P 1	
	VXA2689	LED C.B.A. UNIT		
		DIODES		
D1501	GL450	PHOTO DIODE	1	
		MISCELLANEOUS		
	W60911	LED HOLDER	1	
	VJ00254	FLEXIBLE C.B.	1	
	VEP00834A	TAKUP PHOTO Tr C.B.A.		

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
		CAPACITORS		
C1502	EC36V1H1020RN	CERAMIC 50V 1000P	1	
		RESISTORS		
R1503	ERDS2TJ222	CARBON 1/4W 2.2K	1	
		CONNECTORS		
P1503	UJ81936		1	
P1508	UJF1242T		1	
		TRANSISTOR		
Q1502	PN150MV	PHOTO TRANSISTOR	1	
		MISCELLANEOUS		
	UMD0645	PHOTO TR HOLDER	1	
	MEP00835A	SUPPLY PHOTO Tr C.B.A.		
		CAPACITOR		
C1501	EC36V1H1020RN	CERAMIC 50V 1000P	1	
		TRANSISTOR		
Q1501	PN150MV	PHOTO TRANSISTOR	1	
		MISCELLANEOUS		
	UMD0645	PHOTO TR HOLDER	1	
	MEP03485A	SYNC GENERATOR C.B.A.		RV-D80EG/EV
	MEP03485B			RV-D80B
		ICS		
IC9501	UPD74HC221AC	IC	1	
IC9502	UPD4001BC	IC	1	
IC9503	UPD74HC221AC	IC	1	
IC9504	UPD74HC221AC	IC	1	
IC9505	UPD4001BC	IC	1	
		RESISTORS		
R9501	ERDS2TJ103	CARBON 1/4W 10K	1	
R9502	ERDS2TJ472	CARBON 1/4W 4.7K	1	
R9503	ERDS2TJ472	CARBON 1/4W 4.7K	1	
R9504	ERDS2TJ103	CARBON 1/4W 10K	1	
R9505	ERDS2TJ103	CARBON 1/4W 10K	1	
R9506	ERDS2TJ273	CARBON 1/4W 27K	1	
R9507	ERDS2TJ103	CARBON 1/4W 10K	1	
R9508	ERDS2TJ103	CARBON 1/4W 10K	1	
R9509	ERDS2TJ103	CARBON 1/4W 10K	1	
R9510	ERDS2TJ103	CARBON 1/4W 10K	1	
		CAPACITORS		
C9501	EC2A0JK470	ELECTROLYTIC 6.3V 47P	1	